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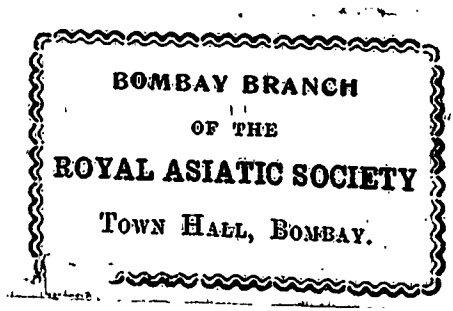

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CHRISTIANITY

AND

MANKIND,

THEIR BEGINNINGS AND PROSPECT

BY

CHRISTIAN CHARLES JOSIAS BUNSEN,
D.D., D.C.L., D.PH.

EEI
vol 3

IN SEVEN VOLUMES.

THIRD VOLUME.

PHILOSOPHICAL SECTION.

OUTLINES OF THE PHILOSOPHY OF UNIVERSAL HISTORY, APPLIED TO LANGUAGE AND RELIGION.

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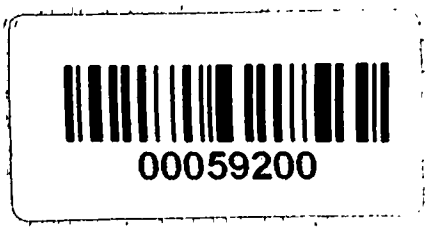

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DEDICATED

TO

RICHARD ROTHE.

EINST AUF KAPITOLES HÖHEN KNÜPFTEN WIR DEN HEILGEN BUND,
ALS DU GEISTESKRÄFTIG THATEST DORT DES HERREN WILLEN KUND:
ALS WIR GLÄUBIG UND IM STILLEN BAUTEN DIE GEMEINDE AUF,
DIE DER MENSCHHEIT OPFRUNG WEIHEND EWGES WIRKT IM ZEITENLAUF.

DREISSIG JAHRE, BALD VERFLOSSEN UNTER SORGEN UNTER MÜHN,
SAHEN MANCHE HOFFNUNG SCHWINDEN, FRISCH' UND JUGENDKRAFT VERBLÜHN:
DOCH HAT IMMER SICH BEWÄHRET JUGENDSTREBEN JENER ZEIT —
DAS MIT ERNST UNS WAR GERICHTET AUF DAS ZIEL DER EWIGKEIT.

FEST UND FRISCH IST AUCH GEBLIEBEN UNSRER HERZEN LIEBESBAND,
SEHEN BEID' IM GEIST VEREINET NACH DES GEISTES VATERLAND,
WISSEND DASS IN DIESER ERDE HAT GEZÜNDET GEISTES BLITZ,
UND DASS EINST IHR KREIS SOLL WERDEN FREIEN GOTTESREICHES SITZ:

WISSEND AUCH DASS UNSREM VOLKE WARD EIN GÖTTLICH HOHES PFAND,
DASS DER GEIST DES HERREN WEHET NOCH IM GROSSEN VATERLAND,
DASS ER HEILEN WILL WAS SIECHET, EINEN WAS ZERRISSEN WARD,
UND VERKLÄREN SICH AUFS NEUE IN DER FREIEN DEUTSCHEN ART.

WAS NUR SICH GELEBT MUSS SINKEN UNBETRAURT IN TODES FLUTH,
DOCH WAS MENSCHHEIT AUGSGEPRÄGET SCHWIMMET IN DER ARCHE HUTH:
WAS IM BILDE, WAS IM TONE, WAS IM WORTE GOTT VERKLÄRT,
LEUCHTET DURCH DER ERDE NÄCHTE, SPÄTESTEN GESCHLECHTERN WERTH.

VON DEM TEMPEL, DEN WIR SCHAUTEN IN DES GLAUBENS MORGENROTH,
HAB' ICH STEINE MIR GERETTET AUS DER ZEITEN BITTREN NOTH:
RICHTE DU, NACH DEINEM BILDE, SELBST DIR AUF DEN WUNDERBAU,
DASS DER GEIST AUCH IN DEN TRÜMMERN NOCH DES URBILDS PLAN ERSCHAU.

PREFACE.

THE work which I venture to present to the public is the development of the Philosophical Aphorisms, which formed part of the First Edition of "Hippolytus and his Age." Its object is to trace the Outlines of a Philosophy of Universal History, especially with a view to discover and define the principle of progress, and to apply these general principles to Language and Religion as the two universal and primitive manifestations of the human mind, upon which all subsequent social and national development is based.

Such an inquiry necessarily contains two elements, the historical and the speculative. Now as to the history of Religion, and that of Christianity in particular, it has been treated of in many works ancient and modern, and I have had an opportunity of discussing the philosophical and constitutional portion of the history of the Primitive Christian Church in the new edition of "Hippolytus and his Age."

It was, therefore, possible to allude simply to the leading facts of that history of our religion, and to confine the inquiry almost exclusively to the philosophical principles, and their bearing upon the present state of the world.

The only exception I have made regards the Author of our religion himself. This exception was indispens-

able. All the controversies and misunderstandings respecting Christianity, and especially those relating to the metaphysical points, must in the last instance be reduced to the question what Christ thought and said of his own person and of the object of his teaching, of his relation to God and to mankind. All inquiries into the history of the Church presuppose this basis, and so especially does "Hippolytus and his Age."

The most authentic representation of this sublime object seemed to me to be the one which might be most easily brought within the compass and limits of these volumes, and rendered most accessible to all my Christian readers. The whole is compressed into two short chapters. The first presents a sketch of Christ's teaching, considered from the point of view of universal history: the second contains the outline of Christ's own theological teaching in particular, and the comments upon it by St. Paul and St. John. This chapter illustrates the principal passages relating to the metaphysics of religion, by a juxtaposition of the Semitic text and the Japhetic exponent — I mean by a translation from metaphorical into philosophical language. As introductory to these translations I have prefixed to them the specimen of a dictionary of the principal metaphorical expressions in the New Testament for spiritual (intellectual) notions with their ethical and metaphysical exponents in the philosophical language of Japhet, that is to say, in those terms with which we reason since the days of Thales and Pythagoras, and since those of Plato and Aristotle.

The Philosophy of Language demanded a very different treatment. There exists no work which gives the leading facts of the languages of Asia and Europe,

inclusive of those of Egypt and Abyssinia, on the principles of comparative philology, as they are now understood. Besides, since the publication of Adelung's Mithridates, and even since Prichard's meritorious and conscientious work, important discoveries have been made as to the very facts of the grammatical and lexicographical construction of the languages of Asia, to say nothing of that of ancient Egypt, then entirely unknown. Some of the most interesting fields of philological research, were thus to be opened here for the first time, in order even to establish the facts.

This is the reason why the historical, and especially the philological portion of the Philosophy of Language has, in a certain sense, assumed the character of a forerunner of a new Mithridates for Asia, Europe, and a part of Africa. I say, in a certain sense: for the analysis presented here gives in some respects less, in some more, than such a Mithridates should contain. The sketches offered in these volumes convey simply the positive linguistic facts, and mention only cursorily what is generally acknowledged as having been sufficiently ascertained. They enter into details only in such portions as are either entirely new, or at least have not been considered under the point of view of universal comparative philology. The method employed throughout has, I believe, the merits of simplicity and clearness.

In the whole arrangement I have endeavoured above all to make one of the most important objects of universal interest accessible and attractive to all readers of cultivated mind, by presenting in the most succinct manner the essential facts, in order to enable the public to deduce for themselves the surprising results which flow from a combined historical and philosophical

treatment of this youngest, and perhaps most promising branch of scientific inquiry.

I have endeavoured in a similar manner to divest religious philosophy both of antiquarian pedantry, and of theological conventionalism. Above all, it has been my anxious wish to excite my readers to serious, and therefore free reflection on Religion. The religious sense of the European mind is undoubtedly more universal now than it has been for at least two centuries. The noblest individuals and nations manifest a thirst for religious knowledge, and a longing after evangelical truth, as the only sure basis of liberal and peaceable development. I must confess, however, that I see no hope of that feeling taking the right course, and that longing being satisfied, unless the great mass of the thinking and serious public make it, more than hitherto has been done, the object both of research and of thought; not in order to build up new theological systems, or find a fresh stimulus for intellectual excitement, but in order to strengthen and restore inward truth, and thence proceed to the reform of social and public life.

Such an earnestness alone, flowing alike from the head and from the heart, can restore the religious element of European society, and make Christianity in truth the means of general social reconstruction.

Carlton Terrace, 20th April, 1854.

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FIRST PART.

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HISTORICAL RESEARCH AS TO LANGUAGE.

GENERAL INTRODUCTION.

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OUTLINES.

THE HISTORY

OF

THE PHILOSOPHY OF HUMAN DESTINY AND DEVELOPMENT.

FIRST CHAPTER.

THE BELIEF OF MANKIND IN A MORAL ORDER OF THE WORLD, AND IN THE PROGRESS OF THE HUMAN RACE.

THE noblest nations have ever believed in an immutable moral order of the world, constituted by divine wisdom, and regulating the destinies of mankind; and their wisest men have ever expressed their conviction of the reality of this faith, in different terms, but with marvellous harmony as to the substance.

If this general view of human destinies be right, if the universal faith of humanity and the holiest aspirations of philosophy be not delusive, to draw the picture of an age is to write a chapter of the universal history of mankind: and what is this, but to recompose a canto of that most sacred epic or dramatic poem, of which God is the poet, humanity the hero, and the historian the prophetical interpreter? Christianity has diffused over the world the idea of the unity of the human race, once the solitary belief of the Jews, and obscured by their national exclusiveness; the historical philosopher, starting from this idea, has been enabled to view the development of mankind in this light of Christianity; the noblest minds of all Christian nations have recognized a visible and traceable progress of the human race towards truth, justice, and intelligence.

There is a moral order of the world, and there is a progress. These two articles of faith, modified by national and confessional differences, may be considered as forming the basis of all the inward, real, and efficacious religious feeling and conviction which exist in the thinking and cultivated minds of the Christian world. Although in particular cases they may be combined with an imperfect Christian belief, they are decidedly Christian; and there cannot be, in any religious society or nation, a real Christian faith, where indifference or materialism has destroyed the acknowledgment of them.

Indeed, if there exist a divine rule of human destiny and development in the history of mankind, a philosophy of that history must be possible. For there is no divine rule which does not originate in reason, and which is not essentially reason. Whoever grants so much, must also allow that the historian, who undertakes to interpret the great hieroglyphic of the times, and restore the stray sibylline leaves of history, ought to believe, with Pindar, in the divinely given beginning and end of man. He must, at least, firmly believe that if there be laws regulating the development of humanity, those laws must be founded in eternal reason.

The truly philosophical historian, therefore, will believe that there is an eternal order in the government of the world, to which all might and power are to become, and do become, subservient; that truth, justice, wisdom, and moderation are sure to triumph; and that where, in the history of individual life, the contrary appears to be the case, the fault lies in our mistaking the middle for the end. But there scarcely can be any doubt of this truth in the history of nations. There must be a solution for every complication, as certainly as a dissonance cannot form the conclusion of a musical composition. In other words, the philosopher who will understand and interpret history must really believe that God, not the devil or his pulchinello, Accident, governs the world.

SECOND CHAPTER.

HELLENIC AND HEBREW BELIEF IN A MORAL ORDER OF THE WORLD.

In so far as religion, subjectively, rests upon that general belief in a moral order of the world, ancient literature is more religious than that of the Christian period; unless modern writers on the subject have only too well succeeded in disguising their belief. The seers of religious Greece certainly were inspired by this faith: the Iliad, as well as that model of novels, the Odyssey, proclaims it loudly. The popular tradition of preceding centuries, upon which the Iliad rests, is founded upon it. This poem, to the formation of which the national mind contributed no less than the genius of the man to whom we owe its groundwork, would have been impossible, had there not been instinctive consciousness of these laws. But no nation ever had a clearer perception of the moral law ruling human affairs than the Greek. It had become among them their ethic religion, and had acquired the keenness of an esthetic feeling, so that offence against these laws was as much an outrage upon good taste, as a sin against the religious instinct of humanity. Pindar and all the great lyrical poets believed in a divine Nemesis; but those twins of the tragic Muse, Æschylus and Sophocles, manifest this view of human life in its most universal form. It was their inmost religion, and formed the real centre of the religious feeling of the Hellenic mind. Æschylus was philosophically conscious of its essential truth; for he opposes it expressly to the terrible "old doctrine," to that despairing view of Asia, according to which, not to be born at all is considered better than existence, and to die better than to live. Is it not, then, time at last to put a stop to that talk of German romanticists and

indomanes, of English Buddhists, and of all those who throughout Europe now tend to revive and adopt the errors and follies of the ancient Christian writers, respecting this subject, as to Greek religion and wisdom being borrowed from the East?

The same view of the destinies of man which makes the great poets of Greece the prophets of humanity for all ages, and stamps Herodotus as the first of its historians, shines with heavenly light of religious faith in the galaxy of those heroes of faith, the prophets of the Hebrew people. They proclaimed, in an uninterrupted series during more than a thousand years of national life, the fundamental truth of all philosophy of history, that the divine principle of truth and justice, which is visible in the social and political institutions of the nations, will prevail, will expand without limit, and will finally make this earth the kingdom of God. They do not undertake to prove this truth; they see it: they speak out of the fulness of their intuitive belief in it, and suppose a corresponding belief in those whom they address. But when the Jewish mind began to philosophize, and endeavoured to produce dialectic proofs, its theodicean philosophy, or justification of God, stopped, in the Book of Job, at the avowal of the incomprehensibility of the destinies of mankind. And when, after the loss of national independence, and in the wane of prophetic spirit, the Ecclesiastes, a pious and philosophical author of the Persian times, tried to argue more strictly on dialectic principles, he found no weapons against doubt, and no defence from despair, except submission, and the keeping of God's commandments.

THIRD CHAPTER.

CHRIST, THE APOSTLES, THE FATHERS, AND THE MIDDLE AGES.

THE very foundation of the religion of Christ is the faith in a development of mankind towards a great and glorious triumph of the eternal decree of love, identical with the moral order of the world. That faith is to change the existing politics, Jewish as well as Gentile,—both doomed to perdition,—into nations and states governed by a law founded upon justice and charity, and taking its highest inspirations from the love of God, as the common father of all mankind. It is sufficient to point to the Parable of the Guests invited to the king's meal (Luke, xiv.), compared with that of the sower (Matt. xxii. and Mark, xiii. 38.). ("The field is the world.")

Although the Apostles had no clear view of the application of that doctrine and of those promises to the age in which they lived, they preached faithfully and effectually that divine, world-renewing philosophy of the history of mankind, and by doing so laid the foundations of a purified revival of the hopes and aspirations of the ancient world.

The fathers of the Christian Church had all hope in a world to come, and none in that in which they lived and died; but they manfully maintained the doctrine of the good God's having created, having ever governed, and still governing this world, against the despair of Celsus, as well as against the Gnostic denunciations of the Jewish dispensation, and against that frightful dualism of the good and evil principle, the offspring of the despair and effeteness of the nations of the world.

The middle ages are the chrysalis of the new world. They appear in their first period as universal night and deadly sleep,

and then as a crystallized formalism of corporations; but we now can recognize in them grand germs for that national regeneration which Christ had in view from the beginning. The development of the Christian life had stopped there in the fourth century, when Christianity became the religion of the Roman Empire, simply because there was no national life remaining. The new Germanic race was to be trained to moral responsibility, and thus to national independence also, in religion.

For these reasons there was no great and sound philosophy of the history of mankind possible from the second to the fifteenth century. It was in this century, that the despair and impatience of mankind reached its highest pitch. There were nations forming, civilization and science were expanding, the fine arts were flourishing; but the hopes of the thirteenth and fourteenth centuries had not been realized: the free cities were cramped into oligarchies; the Italian republics were crushed, with few exceptions, and absolutism crept into Europe. But, above all, the corruption of the higher and highest classes was almost universal, and the mutual confidence between the different elements of society was becoming extinct.

FOURTH CHAPTER.

THE SIXTEENTH CENTURY, THE REFORMERS, SHAKSPEARE, AND BACON.

THE leading men of the sixteenth century made a noble stand to save mankind from despair, both by calling forth the divine power of the Gospel, and by reforming the social and political state of the world. The individual moral responsibility of man was appealed to, as the test for distinguishing the real heart-renewing faith from external religious practices; and the kingdom of God was prepared by applying its principles to the reform of the existing state of things, in the family and in the state, and in every sphere of social life. The philosophy of human destinies thus took on the one side preeminently a theological and Semitic form, although with the decided tendency towards a more general humanitary view, and, on the other, a practical and political one. None of the reformers was an eminent philosopher of history, but each of them had a faith in the destinies of mankind and the regeneration of nations through the Gospel. They led the way to a renewed state of society, which might, and indeed must, and did already, to a certain degree, become a sound basis for a hopeful and truly Christian view of human destinies upon earth.

The great prophet of human destinies, on the awakening of the new world, was William Shakspeare; he was so, much more, and in a higher sense, than Bacon. His "Histories" are the only modern epos, in its true sense, as a poetical relation of the working of the eternal moral order manifested in a great national development. They are the Germanic "Nibelungen" and the Romanic "Divina Commedia" both united and dramatized. The dramatic form was the natural organ of the epos in an age ripe for the realities of life, and full of action.

FIFTH CHAPTER.

THE SEVENTEENTH AND EIGHTEENTH CENTURIES.

WHEN in the seventeenth century Europe emerged from the blood and destruction into which the pope and the Catholic or Catholicizing dynasties had plunged it, the world, which had seen its double hope blighted, despaired almost both of religious and civil liberty. The eighteenth century, not satisfied with the conventional theodicea of that genius of compromise, Leibnitz, found no universal organ for the philosophy of history, except the French encyclopedic school; and this school had no regenerating and reconstructive idea, save that of perfectibility and progress. But what is humanity without God? what is natural religion? what is progress without its goal? These philosophers were not without belief in the sublime mission of mankind, but they wanted ethical earnestness as much as real learning and depth of thought. They pointed to civilization, as to the goal of the race which mankind had to run. But civilization is an empty word, and may be, as China and Byzantium prove, a caput mortuum of real life, a mummy dressed up in the semblance of living reality.

That century called certain self-complacent general reflections upon incomplete, incoherent, and often entirely spurious materials, the "spirit of the age." It was indeed, as Faust observes to Wagner, a spirit of an age; but the spirit was that embodied in the conceited writer, and the age was at best nothing but an unsuccessful attempt to attain the perfection of the eighteenth century.

> "Was ihr den Geist der Zeiten heisst,
> Das ist im Grund der Herren eigner Geist,
> In dem die Zeiten sich bespiegeln."

The hollowness of that view showed itself most conspicuously in the climax of this whole philosophy, the "spirit of universal history." That spirit exhibited the conceited and shallow character of the age, whereas a truly historical picture ought, on the contrary, to reflect the pure image of the past, and be a true mirror to ourselves.

SIXTH CHAPTER.

BOSSUET AND LEIBNITZ.

BOSSUET had tried to charm that spirit by epicizing the catechism, and concentrating the universal history of mankind around that of Judaism, the Roman Catholic hierarchy, and the monarchs who protected and defended it. Thus, he reduced ancient history, in so far as it was not Jewish, to episodes in the history of that people, and Greek wisdom in things divine to a confused apprehension of the Jewish traditions; while he himself knew very little of that wisdom, and had a very contracted view of the Jewish traditions. His method is neither historical nor philosophical, nor indeed biblical. The result is an eloquently told fable in ancient history, and an acute sacerdotal special pleading in modern. This must be said, if the truth is to be spoken; and it may be said with all respect, not only for the brilliant talents, but also for what was great in the character, of that eminent man. Bossuet tried to evoke the spirit of the history of mankind by scholastic formulas, based upon Semitic expressions: the answers he received were echo of the questions. The spirit of the past is not to be evoked by such formulas, and neither can Louis le Grand nor the Pope, nor even the uninterrupted hierarchy of the elect of a given nation or class, form the centre of our universal history. Even in his theological ideas, he can never divest himself of the Semitic and scholastic form, nor rise to behold the truth in its divine universality, which is the only true catholicity.

Leibnitz had an entirely Japhetic tendency and cast of mind, and was a believing Japhetite, attempting to combine

with his Germanic element all that was Semitic; and moreover, as much as seemed necessary at the time, all that was scholastic or chrysaline in the distracted Christianity of Europe. The belief in a moral order of the world, emanating from eternal thought, and therefore intelligible to the meditating soul, is at the bottom of his profound speculation, as well as of his vast research and erudition. This fact is also the strongest basis of his belief in Christianity, as represented by the confessions of faith of the churches of Christendom. His theory of "the best world" necessarily failed, because it was a not quite honest compound of speculation and of divinity. Still his "Theodicea" (1712), a justification of the ways of God, proved a great consolation to many of the highest and best minds of the age, wherever a dead formalism had not brutalized the intellect of the higher classes, by rendering it unwilling to connect thought and ethic faith with religion. An equally strong manifestation of his Japhetic catholicity was the comparative philosophy of language, to which he laid the foundation, both by thought and by research.

SEVENTH CHAPTER.

VOLTAIRE AND ROUSSEAU.

VOLTAIRE is the incarnate negation both of Bossuet and of Leibnitz. In opposing Bossuet's tendency, he endeavoured to make the history of the past speak the language of the Encyclopedists, whose philosophy he wished future generations to adopt as their religion, he himself being its high priest. As to the theodicean system of Leibnitz, he ridicules "the best of worlds," but in his serious writings acknowledges a moral order of the world, and a progress of mankind. His view of human nature is less degrading and materialistic than Locke's. The philosophical attempts are, however, more successful than his historical essays, which are full of the most uncritical assertions, and even of the most impudent inventions. His "Universal History" is too heavy for a pamphlet, too light for a book: his diatribes against Christianity are unworthy both of a philosopher and of an historian. Nevertheless the idea of humanity became, through him, more divested of Semitic peculiarities and Hebrew forms; and there is a progress in that, for when the Judaic element becomes oppressive, it is, in modern society, the vocation of literature, as the national element, to unjudaize humanity.

The love of humanity and the faith in its progress is the bright side in Rousseau's eloquent but morbid philosophy. He is free from Voltaire's mephistophelic anti-christianism, and he has something of that mindfulness which the Germans call "*gemuth*," and which forms the lasting charm of his best writings.

EIGHTH CHAPTER.

THE ITALIANS AND VICO.

DANTE had already been obliged to fly to Eternity for justifying God's ways with man. The times indeed grew worse after him: the best men of Italy at the end of the fifteenth century lived, more than those of any other nation, in hopeless despair as to their country, and therefore of the world. The great movement of the sixteenth century, stirring up the European mind in every sphere, called forth Platonic aspirations, but opened also the depth of thorough unbelief in the moral order of the world, as the book of Pomponazzo and the life of his many adherents show. Then came the age of hierarchical and despotic reaction, till, in the eighteenth century, all independence and resistance in the native energies of the national mind was broken down. Despotism could afford to be civilized, even the hierarchy to be tolerant. It was in this period that Vico demonstrated (1725—1744), in his "Scienza nuova," that the organic development of certain epochs, which are found in the social and political history of every nation, contains stronger proof of the moral government of the world, and a higher manifestation of order, of justice, and of progress than any argument *a priori* can supply. This leading idea is more important for the universal philosophy of history than all his particular researches, which are mixed up with fables and fancies, and few of which are now of any interest, either historical or philosophical.

NINTH CHAPTER.

HERDER.

HERDER is the founder of the philosophy of history: nobody before or after him has taken up the grand subject in its full extent. This necessarily includes the physiological element, that is to say, the physical philosophy of mankind; and, on this field, Herder surpassed Haller, and anticipated the great Cuvier, who often said he had been inspired by his work. Nevertheless, Herder, because he took man as he is, as the microcosm of the universe, and considered his bodily organization as the perfection of an ascending series of animal formations as well as the organ of all intellectual development, has been called by superficial critics, according to their fancies, a fatalist, or a materialist. If he failed to refute entirely, and satisfactorily to replace by a higher philosophy, the sensualism and shallowness of the eighteenth century, it was because, outrunning with a noble impetus his own strength, and sometimes filling up the chasms of his knowledge by poetical phrases, he undertook to fight that century (whose child he was) with its own weapons. It so happened besides, that he conceived his great work at a moment when the social structure of the European continent was to be shaken to its foundations, and when the German mind was in the act of preparing better arms for the intellectual fight, both by thought and research. Still with all defects, and although incomplete and considered by himself "the most imperfect work man ever wrote," his "Ideas on the Philosophy of the History of Mankind" (1784—1795) will continue to live and to be studied, when ninety-nine out of a hundred celebrities of this century and of the last shall have

been forgotten. Herder stepped out of Romanic negativeness into Germanic positiveness, and began to reconstruct. Himself a theologian, he universalized Semitic tradition and inspiration, as well as he could, into Japhetic science and philosophy. Religion and language are to him the primitive organic manifestations of the divine life in man. "Religion is the most ancient and most holy tradition of the earth:"—this is the text of his ninth book. Man, according to him, evolves Reason, Humanity, Religion, organically, in consequence of the faculties divinely united in his mind; and he does so under divine guidance. Herder's ideas, though of course incomplete and defective in their development, are great and profound.

TENTH CHAPTER.

THE FRENCH PHILOSOPHY OF HUMAN DESTINIES, FROM CONDORCET TO LA MENNAIS AND COUSIN, AND TO THE MODERN CATHOLIC SCHOOL.

MODERN France has taken a noble part in these highest aspirations of the European mind. As Montesquieu was its patriarch, Condorcet is its martyr. His "Esquisse d'un Tableau historique des Progrès de l'Esprit humain" connects the two periods: that of Condillac, and that of a higher philosophy. It is however more remarkable as a testimony of his earnestness of mind, and from being written in political imprisonment, with the prospect of death before him, than as a lasting monument of philosophy.

Since 1815 three eminent men have taken up this grand subject in the modern French school of philosophy: Cousin, in three Essays or Fragments; and his disciples, Jouffroy and Edgar Quinet, the former particularly in his "Lecture on the human Destinies," the latter in his "Introduction to Herder's Ideas." These writers are living proofs of the progress which the French mind has made since Voltaire, in its view of the destinies of man, and of the philosophy of history. It is to be regretted that Cousin has not made the philosophy of history the centre of his own philosophical system. There is at present no connexion between his speculative principles and his historical views. His acute and methodic mind, by combining the two, would have discovered that the formula at which he and his school have hitherto arrived, as to the relation between philosophy and Christianity, between speculative research and religious worship, is and will remain unsatisfactory, and cannot

be the last expression of the philosophy of the mind. It is negative, and, like all negations, a dissonance. It looks at reality, but it does not enter into it, as if it was an extraneous thing for a philosopher, not the house of his own mind. A serious philosopher, who acknowledges and respects Christianity, must make its records and history the subject of critical inquiry, both historical and philosophical, in order to find out in what form it agrees or does not agree with philosophy. Having found that form which appears to him the one most conformable to the mind of its Divine Author, the philosopher ought not merely to approve it theoretically, but to adopt it practically. If not, either the philosopher will live without religion, or the religious people without philosophy. A religiously disposed philosopher must be a worshipper, and an active member of the Christian fellowship. For it is a sad mistake, or a merely defensive provisional position, to suppose that because in France philosophy has now begun to take account of the religious element, religion will cease and be replaced by religious philosophy. Philosophy must go a step further, and the philosophic mind join conscientiously in religious worship and congregational life, proposing their reform, if reform appear necessary. But how can it do so, without instituting an independent, conscientious, and free inquiry into the claims and truths of Christianity? This requires erudition, but Cousin has it.

This truth has been deeply felt by some younger philosophers of the same school, such as Barthélemy de St. Hilaire, Lerminier, Jules Simon, and particularly by Saisset, in his "Essais sur la Philosophie et la Religion du 19e siècle" (1848), especially in the second section, which treats of the philosophical school of Alexandria. Through all these works there is visible a very marked progress in the positive philosophy of history and of religion. German philosophers and historians might learn much from the method, clearness, and precision of such researches as these.

The thoughtful works of these theodicean apostles in France exhibit undoubted signs of life. Nothing, on the other hand, excepting only the reactionary clerical tendencies and productions, is more destructive and distracting than the popular philosophy of France, as manifested in French novels. The doctrines of the school of Victor Hugo, Balzac, and Alexandre Dumas are built upon the despairing consciousness of a torn and lacerated age, incapable of believing in anything, although religion be made the principal spice to season their fictions. These writers exert a marked influence over the reading public of Europe; and the rhapsodies of Eugene Sue have shown what power the dark suspicion looming in the recesses of society, exercises over the masses of the European people. The spectre of despair, which pervades their songs of death, passes into nine-tenths of the productions of the European stage, particularly into the ever new forms of that sad, barbarous changeling, that favourite of the highest classes of society, the opera, which has been substituted for the ancient national drama. There the rags of religion are thrown over the spectre of death. Religion is used as a "sauce piquante" for the putrid dish of incredulity. It is à sauce "au moyen age à la dernière mode de Paris." Organs on the stage instead of flutes, hymns instead of sentimental songs, processions of monks or nuns instead of military shows, are all symptoms of the same elements of destruction which are at work in the age. The public is treated like an expiring frog, which requires galvanic shocks to restore sensation, or make it exhibit symptoms of life: thus fulfilling a prophecy of Lichtenberg's (about 1790), that the time would come when people would not eat their roast meat without molten lead. This philosopher also prophesied that a time would come when it would be thought as ridiculous to believe in a God as it then was to believe in spectres: to which Heinrich Jacobi replied, that another time would come when men would not believe in a God, but would believe in spectres;

(he might have added) aye, and in spirits speaking through wooden tables!

In the same manner the innocent garrulity of historical *genre* painting has been seasoned into a medieval religious compound of uncritical history and impudent legends: a mixture of Scotch novels and German romances of the school of Görres, in perfect keeping with the rococo style in art, which combines Byzantine proportions, and Giottesque and Peruginesque countenances of angels and saints, with the pigtail of Louis XV.: the bond of union between these contradictions being hypocrisy and artistic as well as moral impotence.

The opponents of the school of Cousin consist in part of the clerical, or so-called Catholic school; in part of the independent philosophers. Ballanche's noble aspirations are feeble and confused both as to thought and knowledge. There is, among much delusion, some real philosophy in Buchez. But considerable progress is visible in St. Bonnet ("De l'Unité spirituelle, ou de la Société dans son but au-delà du Temps," 1841). Pierre Leroux is dialectical in his polemics, but wild in his reconstruction. Comte's Positivism has no place in the philosophy of history. With his new worship, he is no more the religious, than Romieu with his Imperialism is the political, prophet of the age.

One can understand why Cousin's philosophy does not satisfy the mind of reflecting religious persons in France; and why the popular views of philosophy, as to human history and the destinies of mankind, inspire them with fear, if not with horror. It must be confessed, however, that the arguments advanced against them, by what is called the strictly Catholic party, is certainly incapable of satisfying the thinking human mind, and the cravings of the best spirits of that ingenious nation. Guiraud's "Philosophie Catholique de l'Histoire, ou l'Histoire expliquée" (to name one out of many) is a strange compound of

scholastic dreams and gratuitous assumptions, imperfect and blundering both as to speculation and facts, so that it must be considered a retrograde step, either as compared with Bossuet or with De Maistre's spirited, though very one-sided, views on the subject.

Amid this distraction an isolated but remarkable position has been taken up by De la Mennais, in his "Esquisse d'une Philosophie" (4 vols.), published in 1840, but evidently conceived and composed before 1831. This remarkable work has passed almost unnoticed in France, on account, probably, of the personal position of the author and of the hybrid nature of the system. It is, however, incontestably, not only by far the most important production of that deep thinker and powerful writer, but one of the leading books of the age respecting the human mind. Not that it can be called a philosophy of history. It is simply a philosophical psychology, one which considers man in his primitive relations to God and the universe. It rectifies considerably the views which had been adopted in France and partly in England, respecting first and secondary causes, mind and matter (the latter he well defines as simply expressing negative limitation), and respecting the productions of art, as manifestations of the beautiful, which he takes to be the True manifested in Form. The original conception of the book excludes the philosophy of religion, and even of the state, and presupposes a domain of revealed truth, to be believed on traditional authority, by the side of the domain of reason or philosophy. Such a separation is arbitrary and false, nor is it in harmony with the philosophical position since taken up by that classical writer. But the author still lives, and his work is not finished.

As to Protestant France, Vinet has embodied, in various articles and essays, deep thoughts and noble aspirations on the philosophy of history. The only sign of life in this field, which at present can be noticed, is the general view of Christian philo-

sophy taken by the editors of the "Revue de Théologie et de Philosophie Chrétienne;" in one of the last numbers of which (July, 1851) there is an excellent fragment of an unpublished article on the philosophy of history ("La Naissance de l'Eglise") from the pen of M. Trottet.

ELEVENTH CHAPTER.

THE DUTCH, ENGLISH, SCOTCH, AND FLEMISH VIEWS OF THE PHILOSOPHY OF UNIVERSAL HISTORY.

THE nations which in the seventeenth and eighteenth centuries carried out the idea of Christian reforms in the shape of the sovereignty of law over arbitrary power—the Dutch, the English, and the Scotch—have not shone preeminently by their books on the philosophy of history. Their national philosophy of history is written in the immortal pages of their public and domestic institutions, and may daily be read in the sanctuary of a pure family life and in the mutual trust which pervades all their social relations. This is the living monument of their faith in a moral order of the world. As to literature, the Dutch life had a philosophical exponent of this faith in the younger Hemsterhuys. The philosophical school of Flemish Belgium, which took a part in the movement of 1830 for national independence, was Flemish Germanic, not of the Paris school. The year 1827, as the era of the foundation of the Free University at Brussels, marks a period in the history of the European mind, and in French literature, in reference to the philosophy of history. The philosophical school of Belgium is its most eminent product. The patriarch of this school is Van Meenen, whose disciple, Van de Weyer, the editor of the philosophical works of Hemsterhuys, has not ceased to be its most illustrious member by entering into public life. These men have taken up an original and highly important position between the sensualism of Condillac and his successors on one side, and abstract German metaphysics on the other. The Belgian school has now a young and distinguished representative in Tieberghien, as is proved by his

"Essai théorique et historique sur la Génération des Connaissances humaines."

As to Scotch philosophy, its ethic school, which is its most brilliant part, has chosen for its object the abstract notions of the moral government of the world, rather than the task of bringing under its scope the phenomena of the destinies of mankind. However, we may still hope that the acute author of the "Philosophy of the Conditioned," Sir William Hamilton, will give us the application of his method to a problem which must always have been before his mind. To throw down the wall of separation between philosophy and Christianity will necessarily be the first step in this direction.

England has in this century returned to the course indicated rather than traced by Bacon. The first name which history has to mention in this department is that of Coleridge, a man greater by the influence of his inspiring genius, than by his writings. The progress is marked, in two diverging directions, by Frederick Maurice and by Thomas Carlyle.

The system of thought of the former of these writers, as laid down principally in his "Kingdom of Christ," his History of ethic philosophy, and his Lectures on the religions of the world, may, with reference to the present inquiry, be said to have its centre in the following ideas. He believes the conscience of men at the present day to be at war with the popular theology, and this theology, among Romanists as well as Protestants, in England as well as on the Continent, to be ineffectual, because it contemplates humanity, not as created and constituted in Christ, but as a fallen evil state, out of which Christ came to redeem a certain number of those who believe in Him. This theology he holds not to be that of the Bible, or of the Church, as represented in the creeds of Christendom. The Bible represents *Man* as formed in the image of *God;* the Fall as the rebellious effort of the individual man to deny that glory for himself, i. e. to deny his human condition. This denial, be-

ginning with the first man, is continued in all his descendants, the flesh of each struggling against that law of kind under which God has placed it. The Bible is an orderly history of God's education of a particular race to understand the divine constitution of humanity, and the possibility of a man, by faith, living according to it. This education does not contradict the pagan records, but explains them, and shows how the living Word was in all places and in all times the light of man. Christ, not Adam, represents humanity. Christ's redemption is the *revelation* of humanity in its true state and glory. The faith of a man is in the privilege which God has conferred on his race. Since the appearance of Christ, the kingdom of God is come and coming: we live in it. The incarnation, death, resurrection, and ascension of Christ, the gift of the Spirit, the formation of Churches, were the preparation for a judgment upon the old world—a judgment answering strictly to the anticipations of it in the apostolical epistles. Then began the New Dispensation or kingdom of God, based upon the full revelation of His name, the name of the Father, the Son, and the Holy Ghost—a kingdom for men as Men. The baptized Church is the witness of this kingdom. God has educated the nations by it, precisely in the same sense and under the same limitations as he educated the nations in the old world by the Jews. The Old Testament remains to us an explanation of the conditions of national life, which is just as precious and necessary in the New Dispensation as in the Old. The New Testament explains the full law and glory of humanity. If a nation cannot fulfil the idea of the Old Testament, by acknowledging a righteous, invisible king over it, it will sink into a godless absolutism. If humanity does not acknowledge its constitution in Christ, it will sink into godless democracy.

As Maurice may be called the Semitic exponent of the deepest elements of English thought and life in this department, Carlyle, as a philosopher on history, or rather as manifesting in his

writings such a philosophy, may be designated its Anglo-Germanic prophet. He considers it his principal vocation to point out that all real progress and all development in history are due, as far as man is concerned, to the inward truth and reality in man, and in the highest degree to the "heroes" of mankind. Both individuals and nations who act contrary to that reality fulfil their destiny by perishing. Although his exposition and that of Maurice may appear diametrically opposed to each other, the Continental inquirer will easily discern in both the same national instinct to consider real life and action as the final object of man, as the highest reality of thought, and the safest, if not the only safe, standard of truth.

As to the works bearing directly upon the principal subject of these aphorisms, Morell's "Philosophy of Religion" (1849) exhibits not only a very marked improvement upon the "History of Philosophy" by the same author, but indicates, timidly yet sincerely, the way in which the most aspiring minds of the growing generation evidently strive to restore the alliance between Reason and Faith, between Thought and historical Belief, between Philosophy and Religion.

TWELFTH CHAPTER.

GERMAN RESEARCH, AND SPECULATION ON THE PHILOSOPHY OF UNIVERSAL HISTORY.

To find a universal, true, and positive, not negative, solution of the problem of the philosophy of history, may be said to have formed, and to continue to form, consciously and unconsciously, the ultimate object of that great effort of the German mind, which produced Goethe and Schiller in literature, Kant, Fichte, Schelling and Hegel in philosophy, Lessing, Schlegel, and Niebuhr in critical philosophy and historical research. Schiller and Goethe, the Dioscuri of German literature, restored to Germany (what Lessing's criticism had prepared) the religious tragedy; that is to say, the idea of real dramatic composition. As the drama, no less than the epos, must have its centre in the belief that there is a divine justice manifested in the history of mankind, its restoration was the acknowledgment of the divine order of human destinies. This view, after having been revived for the Christian world by Shakspeare, and (although with fantastical distortions and national idiosyncrasies) by Calderon, had been conventionalized into passion and love-intrigue by the French tragedians, and had died away under the impotent hands of Addison and his cotemporaries. At the same time Kant unfolded, in his critical review of the faculties of the mind, the idea that positive religion presupposes reason, and manifests a form of eternal truth, thus throwing down for ever, so far as philosophy itself is concerned, that baneful and godless wall of separation which has deprived history of the holiest historical characters, philosophy of its most sublime object, religion, and divinity of nothing less than of divine reason. Fichte and

Schelling abolished the distinction which Kant, in his positive system, had established between theoretical and practical reason; and the latter insisted upon the acknowledgment of an identity between the mind and the world, as the two sides of one and the same divine manifestation. It is unnecessary to show how the history of mankind, and consequently the history of the human mind, were exalted by this view, and how speculation was driven from abstract formulas into the reality both of nature and history. Hegel undertook to complete this system, by proving that all which exists or ever has existed in history has an inward necessity in virtue of which alone it is enabled to exist, and that it exhibits the laws of the universe, which, according to him, are those of the human mind, embodied in unconscious matter. Of these laws he takes the logical process to be the metaphysical and dialectical exponent, as offering the highest formula for every evolution in nature or history.

Whatever may be thought of the peculiar reconstructive speculations of the masters of this German school, it is a fact that their criticism of the philosophy of the mind has restored the principle of free and responsible moral agency, and of the primitiveness of reason and faith. In accomplishing this they have done more than any other school to restore the inward reverence for religion, and a belief in the higher destinies of mankind. It is this school, especially, which has vindicated inward religion from the materialism and scepticism of the philosophers of England and France, and has formed in Germany an invincible bulwark against that theory of human life which has crept into most of the thinking minds of those countries. Englishmen who have written with contempt on the speculative German school have betrayed either an entire ignorance of the contents of the works they criticize, or a lamentable incapacity of following strictly dialectical and systematic reasoning.

It is another question, whether the purely constructive or formalizing system has laid hold of the realities of history more

than of those of nature. There is, particularly in the Hegelian system, no bridge between the formulas of the logical process on the one side, and the reality of existence on the other. Very often there is not even a real connexion between that supreme formula and the shape it takes in its application to a peculiar subject, as, for instance, to the philosophy of universal history. This being the case, such a philosophy of history necessarily becomes a hybrid compound of history and speculation. Historical evidence is summoned in support of philosophical assertions, not proved philosophically: and metaphysical demonstrations are conjured up to prove facts, which at all events are not thoroughly sifted, and very often not established at all, or of which the very contrary has or may be proved. In no case can history supply the defect of philosophical argument, or philosophy the want of evidence. Thus Plato's and Cicero's fanciful etymologies do not become true, because they originate in sound philosophical ideas: nor has scholastic subtlety been able to give reality to a fable or a myth, a fiction or a misunderstanding, although it may often have been connected with some deep speculative truth.

The historian who regards the remarkable development of thought in the German speculative school of this century from a European point of view, will certainly be painfully struck by the inferiority of the ethical to the physical and merely speculative development. The German mind seems overpowered by the contemplation of God as Nature and as Thought. His manifestation as conscious Spirit and Will is neglected, and the realization of thought through action is lost sight of: abstract reasoning absorbs the mystery of conscience, and destroys or debilitates the feeling of reality.

The remedy has been prepared, however, by the theological school. Daub and Schleiermacher turned their deep minds to the ethical principle, and to the religious precepts of Christianity, as its highest manifestation. Richard Rothe, in his

system of Christian Ethics, has gone still more profoundly into the very heart of ethical speculation, and proved Christianity to be the realization of the highest divine thoughts: he has considered Christianity as a life, and shown the ethical and metaphysical unity of the Bible.

THIRTEENTH CHAPTER.

CONCLUDING WORD AS TO A NEW METHOD FOR THE PHILOSOPHY OF THE HISTORY OF MANKIND.

To unite the spirit of the Baconian system (for there is very little to the purpose in the letter of Bacon's speculations) with the categories of the German speculative philosophy of the mind, would be a task hitherto unattempted. Bacon's intention and vocation evidently were to sift facts by a complete classification, and thus to prepare them for a truly philosophical investigation. Now, if this idea be examined more closely, it will appear that such a classification must necessarily be a two-fold one. The phenomena of mind (e. g. in language) must first be treated as elements in themselves, considered as single facts: this would constitute the forms of what there *is*, or of evolved existence. But all historical phenomena are connected with each other by the law of cause and effect, subordinately or collaterally: they are the elements of a process of evolution, according to the special laws inherent in the nature of the phenomenon; therefore, in the case alluded to, of language. The first process, therefore, would give us pure, sifted facts: the second would connect them as links of a chain of organic development. The first process would be the strictly philological, the second the historical properly so called; and both would be subservient to the highest form of philosophy. The problem of such a philosophy would be, the reconstruction of the idea by the evolution of its elements, and the explanation of this evolution by the idea.

PART I.

THE

NATURE AND PRINCIPLE OF DEVELOPMENT

IN

LANGUAGE.

INTRODUCTION.

THE PRINCIPLE OF DEVELOPMENT IN GENERAL.

THERE is no finite life except unto death; no death except unto higher life. This formula is the solution of the great tragedy of human life. The individual no more exists for itself than by itself; but its real progress and destiny are intimately connected with the progress and destiny of humanity.

The most primitive and best established proof of this truth is the origin of language. Every language of which we know the history owes its origin to the decay and decomposition of another. But the principle equally applies to the history of religion, which, with that of language, constitutes the primordial history of mankind. An element of life, once established, cannot perish as to its principle; but its forms perish in order to bring on a higher development of that element.

Tribes and nations disappear after having prepared the way for others which are to solve a new and higher problem. In the interval there may be much distraction and confusion: rude ages may intervene between the old and new light; but the idea of humanity always finds its representative at last. A new tribe appears on the stage, and takes up and carries on the torch of divine light, which, in the noble race towards the great goal, had dropped from the hands of the tribe that held it before.

The highest speculative principle of development is this: there must at the appointed time be an Evolution (*Werden*) in a finite form, of that which is in the divine Being (*Sein*) as infinite Thought. This evolution is only possible by the play of antagonisms. Division is antagonism; and finite existence is

limitation, therefore exclusion of its contrary. Universal history is the totality of that divine evolution. Whatever is in the infinite mind undivided, exists in the finite mind and the world successively, and under the principle of limitation.

The ethical solution of the tragedy of human life and of the destinies of mankind (what Aristotle calls the *purification*, *κάθαρσις*, and what is profoundly expressed by the German *Versöhnung*, atonement), is this: ethical effort may in any stage of development realize finitely the divine totality, and thus exhibit within that sphere the ideal of humanity. This applies to individuals as well as to nations.

The intellectual development is either normal or abnormal, exactly as the animal development is either physiological or pathological. The art of distinguishing between the two in history is what diagnostic tact and skill are in medical observation. The difference between them is diametrical. For the one is a crisis of life unto life, the other a crisis of disease unto death. Development is normal, objectively, so far as it evolves reality, that is, so far as it is the evolution of that which is; subjectively, so far as it is the evolution of a conscientious belief, existing in an individual or a community. Every unreal external development is pathological, abnormal, but it may wear the aspect of external progressive life, which is called Civilization. Unreal civilization is only one of the modes of individual and national death.

Whatever man produces in realizing, as his nature urges him, the idea of the True, the Good, and the Beautiful, is the product of the two factors of all creation, the infinite and the finite, which are in this process the individual reason and the *sensus communis*, that is, common sense in its primitive acceptation. But the proportion of the two factors is different according to the nature of what is to be realized. Consequently, the only proper method of a philosophy of history will be, not only to investigate the idea to be realized, but also the elements and laws of development inherent in the particular nature of the thing developed.

And these laws are first to be considered under the category of completed existence (*gewordenes Sein*), and then under that of evolving existence (*werdendes Sein*).

According to these differences, the part contributed by the conscious activity of the individual will be greater or smaller. Religion and language show, more than any other organic activity of man, the preponderating activity of the *sensus communis*. Neither word nor rite suggested by an individual would otherwise be intelligible, and capable of being received or practised, as integrally their own, by a community. The composition of works of art or of science shows, on the contrary, a prevalence of the individual factor; but the artist and man of science know that their most individual works are expressions of a common perception, and therefore independent of self.

The line of development in history is parallel with that manifested in nature. History reproduces in time what the visible creation displays in space — the triumph of the spirit, that is to say, the progress from inorganic to organic, from unconscious to conscious life.

THE HISTORY

OF

THE PHILOSOPHY OF LANGUAGE,

FROM LEIBNITZ TO WILLIAM VON HUMBOLDT.

OUTLINES.

INTRODUCTORY PERIOD.

FROM PYTHAGORAS, PLATO, AND ARISTOTLE, TO LEIBNITZ.

(From about 670 B. C. to 1700 A. D.)

THE profound passage in Genesis (ii. 19.), "And out of the ground the Lord God formed every beast of the field and every fowl of the air, and brought them unto Adam to see *what he would call them*; and whatsoever Adam called every living creature, that was the name thereof," finds its philosophical echo already in Pythagoras. Iamblichus and Proclus report the following as one of his sayings: Having been asked what was the wisest among things? he answered, "Number;" and what next as to wisdom? "The namegiver." This is explained by the account preserved in Clemens of Alexandria (Ecl. Proph., i. 32.; compare Cic. Tusc., i. 25.), that Pythagoras thought of all wise men he was not only the most rational, but also the most ancient, who gave the names to things. Pythagoras, as well as the Bible, supposes man to have formed language, and both consider this act as primitive and analogous to that of the divine mind,

by which there is order and measure in the universe. With Heraclitus "the dark" and Democritus, his cotemporary, begins the antagonism which pervades the whole Greek and Latin philosophy of language. Heraclitus considered the words of language as the shadow of bodies, or the image reflected in the mirror — types of objective reality; whereas the other school saw in them the product of convention: according to the one, language existed by nature (objectively); according to the other, by a positive, arbitrary act of man (subjectively). The first were, according to another term, analogists; the others, anomalists. Plato, in his "Cratylus," and Aristotle, in his "Organon," may be said, however, to be the men who, on the traces of their predecessors, have laid the foundations of the philosophy of language. Plato, following Pythagoras and Socrates, is an analogist; Aristotle tends to anomalism; but, as Plato acknowledges the positive or conventional element, so Aristotle does not deny the objectivity which is at the bottom of language. He is startled by the fact that the languages of men are so many and so different, and therefore places the conventional element first; but, as he expressly says (De Anima, c. i.), that the sounds of the voice are symbolical of the affections of the soul, we must not interpret this only of the interjectional sounds, but also of the words expressing things and thought, or of real language. The speculations of Plato, when rightly understood, bear upon the highest problems of the philosophy of language; the categories and definitions of Aristotle lay the logical foundations of our grammatical system, and establish by themselves the great principle, that language is the immediate product and expression, as it were the mirror, of logic and thought. In the speculations of both we see the entire want of an abstract knowledge of the etymological rules of their own language, and still more of a system, or even a tendency, to compare the Greek tongue with those of the barbarians. Nor did the later philosophers and philologers of Greece and Rome pursue such a course.

Epicurus acknowledges expressly the two elements, and places that which comes from nature through the affections of the soul first, the positive element second. The Stoics originated the grammar, and in particular proposed the first theory of the Greek verb and its conjugation. Aristophanes, Aristarchus, and Crates, and, at a later period, Apollonius Dyscolus, were the acute and learned members of the Alexandrian Academy who erected that fabric of grammatical definitions and terms, which, brought nearer to us by Varro and the later Latin grammarians (of whom Priscian and Donatus are known by name to our schoolboys), has formed the basis of our grammatical system, and through the Syrian christians of that of the Arabs. The Indian grammar, however, is original and ancient.

As to the lexicographical inquiries and speculations of the ancients, their blunders in both are proverbial, and constitute an important fact in the history of the human mind. Their absurd etymologies are the most striking proof of the impossibility of man becoming conscious of his peculiarities, except by contrast and comparison with those of others. They prove, moreover, the incapacity of any nation to understand itself, without having realized, understood, and appreciated the idea of humanity.

"For a detailed history of the philosophy of language among the Greeks and Romans our readers will find excellent and complete materials, solid researches and sound judgment, in Lersch's Philosophy of Language among the Ancients" (3 volumes, 1838 to 1841).

If the Roman world did little for the philosophy of language, although even Cæsar speculated and wrote upon it, the Byzantine age, in this branch also, did nothing but preserve the corpse of ancient science, reduced to formularies and epitomes, such as ages, sinking into materialism or any other form of barbarism, generally prefer to scientific and learned investigations.

The Germanic middle ages had not the means, and did not

feel the vocation, for inquiring into realities, although Christianity had given them the idea of humanity as distinct from nationality, and although the study of Latin, and afterwards of Greek, and the acquaintance with the Saracens, led them naturally to a greater knowledge of the properties and diversities of languages.

The genial and free philology of the fifteenth century, which, on the one hand, prepared the way for the great Reformation of the sixteenth, gained, on the other, by this most memorable event of modern history, an unrestrained liberty of inquiry and the feeling of the sacredness of national tongues. It thus opened the way to wider researches, at the same time that the discoveries of the Spaniards and Portuguese laid a new world open before the awakening European mind. Antonio Pignafetta, an Italian, collected lists of words out of the tongues of the tribes and nations through which he had travelled.

But the only effective progress in linguistic philosophy and knowledge made by the sixteenth century, was due to classical philology combined with the study of Hebrew. The necessity of explaining the Old Testament from its original language led to the study and comparison of Arabic, Syriac, and Aramaic; and it is only necessary to know the two great luminaries of France, Joseph Scaliger and Bochart, to form an idea of the extent and importance of the progress made in this field of science.

On this foundation the seventeenth century attempted to build, as far as its struggles for religious and civil liberty would allow. But, owing to the overwhelming power of the political and ecclesiastical reaction in the greater part of that century, all it achieved in this field was a cumbrous, uncritical superstructure of lexicography. There was no philosophical principle in the speculation of that century, nor any great historical problem to guide its philology, which could have led either

towards physiological or philological discoveries concerning the tribes and languages of mankind.

The mighty genius of Bacon was indeed aware of the importance and mysterious nature of language. The first chapter of the sixth book "De Augmentis Scientiarum" contains ample proofs of both. He there enumerates among the *desiderata*, as a portion of the doctrine De Organo Sermonis, a treatise, "De Notis Rerum," by which he means a philosophical catalogue of real signs (*characteres reales*) corresponding with the number of *radical words* — and also a philosophical grammar (Grammaticam Philosophantem). There is enough for centuries in both these problems. There is also much of wisdom implied in his general invaluable principles of induction and analogy; and it is to be regretted that these germs have not been hitherto fully developed. But Bacon himself did nothing towards that object with respect to language. He neither developed the principles of grammar nor of the formation of words; still less did he attempt a classification of languages, or try to establish a method of inquiry into their nature and origin.

FIRST PERIOD OF LINGUISTIC SCIENCE.

FROM LEIBNITZ, THE FOUNDER, TO FRIEDRICH SCHLEGEL: LEIBNITZ — BLUMENBACH — ADELUNG — PRICHARD.

(1700—1807.)

1. LEIBNITZ.

LEIBNITZ was both the author of the comparative philosophy of language, and the first successful classifier of the languages then known. His principal object in the foundation of the Academy of Sciences at Berlin was, as his memoir of 1700 proves, to insure the progress of such a philosophy and classification of languages, and thereby to trace the genealogy of mankind. His "Brevis designatio meditationum de originibus gentium, ductis potissimum ex indicio linguarum*," and his letter to Tenzel†, form an epoch in the history of our science. We may pronounce his speculations and divinations equally prophetic, as to language, as Kant's hints respecting the system of the celestial bodies, published in 1755, were with reference to the astronomical discoveries which are the boast and ornament of our own age.

The next step towards establishing a historical philosophy of language was made in England. John Harris (1751), in his "Hermes," a book full of ingenious reasoning and learning, laid the foundation of grammatical philosophy, with reference also to the Greek and Roman grammarians.

* Leibnitii Opp. ed. Dutens, IV. B. p. 186. seq. First published in Miscell. Berolin. 1710. See Guhrauer, Leibnitz, ii. p. 129.

† Guhrauer, i. 1.

2. BLUMENBACH.

The great philosopher of Königsberg, in laying the foundations of his speculative philosophy of the mind, entered also into the nature of language and the definition of a race, and occupied himself with the method and importance of a comparative analysis of languages, partly in his philosophical works, partly in his preface to a Lithuanian grammar. About the same time, Albrecht Haller at Göttingen founded modern physiology, with that special application to the races of mankind subsequently developed by Blumenbach.

It was this latter truly learned man, however, who, in the year 1775, laid the foundation of the direct application of physiological science to ethnology and historical linguistic research. His book, "De nativa Generis Humani Unitate," afterwards ably supported and illustrated by his comparative examinations of skulls according to the different races or families of mankind (1796—1828), is, up to the present moment, a classical work on this grand subject. His two axioms, that the "principia," or origines, in nature must not be multiplied beyond necessity, and that the question about the unity of the human species must be decided according to the general law of animal creation, and that such a unity exists wherever a fruitful progeny is procreated — cannot be shaken physiologically. If some recent physiologists have endeavoured to weaken the latter axiom, they have either brought forward supposed facts, long since exploded, or have gone beyond physiology, and lost their scientific ground. It must be gratifying and encouraging to the Christian, to the philosopher, and to the philologist to see how an impartial appreciation of the physiological inquiries carried on from the time of Blumenbach down to Cuvier and Johannes Müller, in their combination with ethnological philology and history, has led the two eminent authors who have combined physiological with phi-

lological research, Dr. Prichard and Alexander Von Humboldt, to the conclusion, that physiological inquiry, although it can never by itself arrive at any conclusive result, still decidedly inclines, on the whole, towards the theory of the unity of the human race.

Soon afterwards (1786), Horne Tooke, the able opponent of Harris, developed, amongst some doubtful speculative theories, very pregnant views respecting the origin of inflexions, suffixes, and formative words: a most important point for the comparative analysis of languages. The ingenuity of Horne Tooke's researches on this head is, perhaps, equalled only by those of Bilderdyk, the Dutch poet, on the origin of the three grammatical genders, which have been entirely overlooked. But none of these three writers has entered into the general subject of the classification and comparison of languages. Nor does the elementary treatise of the great Sylvestre de Sacy on universal grammar approach this problem.

3. ADELUNG.

It was only in the early years of the nineteenth century, that Adelung's "Mithridates" (commenced in 1806, and only completed by Vater in 1817) exhibited for the first time on a general plan as complete a review of all the languages of the globe as his materials enabled him to offer. This careful compilation far surpasses all previous collections, such as those of Hervaz (1785), and of William Marsden (1796), not only as to its completeness, but also its method. Strange to say, he seems to have been unacquainted with the researches of Leibnitz; but he follows out, in a certain degree, Leibnitz's plan. He not only gives the traditional specimen of the Lord's Prayer, in every language, and more or less complete lists of words, with the most characteristic grammatical forms, wherever any existed and were known; but he presents the languages themselves for the first time in systematic order, and classifies them, to a certain degree, according to their affinities.

In this classification he proceeds from the fundamental distinction of monosyllabic and polysyllabic languages, and acknowledges the claim of the former to a higher antiquity. Without adopting a theory respecting races and their origin, or establishing one of his own, he attempts, and often successfully, to group together a vast number of cognate languages. These qualities, and a sober, though somewhat bald, style of writing and composition, have made his work a great authority in Europe. One of the later volumes, moreover, contains one of the most accurate specimens of linguistic analysis which we possess, namely, William von Humboldt's Essay on the Iberian or Basque language. Finally, it must not be forgotten, that it was the study and review of the "Mithridates" which gave Dr. Young, as he himself admitted, the first idea of inquiring into the hieroglyphical system; a subject of no less interest for the philosophy of language than for the history and chronology of antiquity.

But, judging the work by its bearings upon the definitive problem of linguistic science, we must confess that Adelung was merely a linguist, and neither an accurate philologer nor a deep philosopher; and that Vater, in his continuation, has not shown himself either the one or the other. The results of their researches are therefore only elementary and provisional. Even as a compilation, the "Mithridates" is already superannuated. Not only are its materials, in consequence of the copiousness of later discoveries and inquiries, lamentably defective; but the method of arranging and sifting those materials by no means commensurate with the demands and necessities of the present state of science.

4. PRICHARD.

In 1808, two years after Adelung began to publish his "Mithridates," a young English physician (Dr. Prichard) wrote an inaugural dissertation on the varieties of the human race. In 1813, this dissertation was enlarged into a regular work, which,

in its third edition (1836—1847), comprises five volumes, under the title "Researches into the Physical History of Mankind," dedicated to Blumenbach. This work of Dr. Prichard, whom a premature death has taken away from us, but whose name will not be forgotten in the annals of history, opens with the best and clearest discussion of all the elements of natural philosophy which bear upon the great question of the unity of the human species. Up to the present moment there exists no book which treats that question with equal depth and candour. The ethnological inquiry itself, which commences in the second volume, is conducted upon the basis of a clear geographical and ethnological exposition, in which the critical reforms introduced by Charles Ritter, Klaproth, and others, are adopted with independent judgment. In the linguistic portion, Prichard did not content himself with borrowing from Adelung, but availed himself generally of the researches of the critical German school, of which we shall soon have to speak, in those languages which had at that time been subjected to a philological analysis, and, in all the rest, he made use of the best materials which continental and English glossaries and observations offered to him. His great merit in this point is his excellent good-sense and sound judgment. Dr. Latham, in his "Natural History of the Varieties of Man" (1850), has, I think, misunderstood the real value of Prichard's work, when he terms it unparalleled in scholarship as well as physiology. Prichard had no such pretension: he was not a scholar in any language, except Kymri (his own native tongue) and English; but he had a sound knowledge of Greek, Latin, and German, and good taste in selecting and naming his masters, and in learning where he could not teach. As it stands, his work is the best of its kind; infinitely superior, on the whole, to Adelung's "Mithridates."

Thus, by the union of philosophy, philology, physiology, ethnology, and geography, and by the combined efforts of the European nations, particularly of the German and English, the

fundamental thought of Leibnitz had, within the course of a century, been beneficially developed. But there was, as yet, a wide breach between speculation and history. What was the method of defining nearer and more distant relationship, and of distinguishing between historical and accidental, original and subsequent, connexion between the languages of the earth? The philosophers of the eighteenth century had scorned the idea of the unity of the human race: and theologians had assisted them in making the Bible say that God had created language as he had created man, and that language was not the act and work of man; though, as we have seen, the Bible, as well as reason, says the contrary.

The right step was made by a German; and it was India and the English researches into Sanskrit which called forth that step.

SECOND PERIOD OF LINGUISTIC SCIENCE.

FROM FREDERIC VON SCHLEGEL TO WILLIAM VON HUMBOLDT: SCHLEGEL — RASK — GRIMM — BOPP — BURNOUF.

(1808—1835.)

1. FREDERIC VON SCHLEGEL.

In 1808, contemporaneous with Prichard's first appearance, two years after the publication of the first volume of the "Mithridates," a book appeared, small in extent, and on the whole a mere sketch, but possessing all those properties which constitute an epoch-making work — I mean Frederic Schlegel's "Essay on the Language and Philosophy of the Hindoos (1808)." It fully established the decisive importance and precedence which grammatical forms ought to have over single words in proving the affinities of languages. He based this claim on the primeval and indestructible nature, and the unmistakeable evidence, of the grammatical system as to the original formative principles of language. By an application of this method, he triumphantly showed the intimate historical connexion between the Sanskrit, Persian, Greek, Roman, and Germanic languages. This connexion had indeed been already observed by the active and elegant mind of Sir William Jones; but, unfortunately, with so little philological accuracy and philosophical clearness, that his remarks did not lead him or his friends and followers to any historical classification of languages. To the impulse given by Schlegel's work we are indebted in a high degree for the ideas on which the new linguistic school of Germany has proceeded. Its details have no longer any value, since the publication of the elaborate and accurate works on Sanskrit

etymology by A. W. von Schlegel, Bopp, Rask, Burnouf, Lassen, William von Humboldt, Pott, Benfey, Lepsius, Höfer, Max Müller, Weber, and others. All these writers have followed up the tracing of the different branches of languages connected with the Sanskrit. The unscientific expression of "Eastern languages" was abandoned by the learned. The circle of Indo-Germanic languages, as they were called, was gradually extended to the Lithuanian, the Slavonic, and finally, by the combined and independent researches of Prichard, Pictet, Bopp, and Meyer, to all the languages of Celtic origin. Classical philology was not the last to benefit by this great discovery: the grammatical forms and roots of Greek and Latin began to be considered under this new light by eminent Greek and Latin scholars. Such a combination of linguistic researches with real and sound philology is of the highest importance to the success of ethnological researches. It is the only safeguard against unscientific intrusions into ethnology. Linguists, employed merely upon the classification of languages, are very apt to be drawn into a superficial comparison of incomplete and crude materials. The philological treatment of such languages as have a literature and possess literary documents of different periods is best adapted to keep such mere linguists in the path of rational criticism, should they be tempted to decide hastily upon idioms of savages and unexplored tongues, known only from incomplete and undigested vocabularies or even accidental lists of a few hundred words. In like manner, such a philological exercise of linguistic criticism is of the greatest importance to the traveller who purposes to communicate knowledge respecting the languages of savage and illiterate tribes. George Rosen, the worthy brother of the late lamented Professor in the London University College, and Richard Lepsius, when learning the Ossetic, Nubian, and Meroitic languages from the lips of the natives, were able to ask the inhabitants of the Caucasus and of the Upper Nile many more questions than ordinary travellers could have done.

Lepsius' analysis of these two Nilotic languages, collateral to the Egyptian, will, it is to be hoped, soon be before the public as a splendid specimen of this method. The genius of Castren, whose bright star set too soon, but whose efforts will be continued by his friend and countryman, Kellgren, was more competent to ask questions of the uncivilized Turanic nations of Asia than Csoma de Körös, the enthusiastic Magyar.

It is but justice to add, that Frederic Schlegel's half poetical, half philosophical, volume gave the first impulse, and some of the leading ideas, to all these important researches and discoveries. But a Dane is the second, and almost contemporary, hero of this conquest.

2. RASMUS RASK.

When, in 1808, Frederic Schlegel's book appeared, a young Dane of great genius, had already conceived one of the vastest plans of comparative ethnological philosophy, on the same principle, which the history of this science records. Rasmus Rask (from 1807—1812) began with writing preparatory essays on the Scandinavian languages. Between 1813 and 1815, he not only made himself master of the Icelandic, but also learned the Finnic, with a view to ascertaining the principle of organization peculiar to either of the two families represented by these languages. His principal work, "Ursprung der Altnordischen oder Isländischen Sprache," written in 1814, was published in 1817. But, as early as 1816, he had set out upon the great Asiatic journey after which his mind had been yearning from childhood: from Petersburg he penetrated into the interior of Africa, as far as India, studying philologically, on his way, and learning to speak the principal languages, and fixed at last on the Zend and the sacred books of the Parsee in Bombay. Returning with his treasures in 1821, he prepared a general classification of what we now call the Turanian and Iranian lan-

guages; but a premature death carried him away before he could realize his magnificent plan. A complete edition of his works, published and unpublished, with such critical notes and references as the subject requires, in German, would be a great boon to the whole scientific world. Rask anticipated, to a certain degree, some of the greatest discoveries of Grimm, Bopp, and Burnouf. In his Icelandic, Anglo-Saxon and Frisian Grammars he expounded the laws of these languages in the greatest possible completeness and with critical circumspection. In his "Essay on the Thracian Class of Languages" ("Ueber die Thrakische Sprachklasse," 1818), he first exhibited the elements of the law of the transposition of sounds (Lautverschiebung), and made the first, although still imperfect, attempt at a comparative exhibition of German, Greek, Latin, and Lithuanian grammar. To Rask we owe our first real grammatical knowledge of Zend. He thus prepared the way and in part forestalled the results of the researches of the three men who are the leading stars of this period.

3. JACOB GRIMM.

Rask's genial works had already shown the immense importance of the critical, philological, and historical treatment of *one whole branch* of the Indo-Germanic languages, and that one the branch most amply developed and most richly stored with literary documents, as well as best known to ourselves—I mean the Teutonic. But in Jacob Grimm's astonishing work, the Teutonic Grammar, a whole family of languages has for the first time found an expositor, and as it were a historiographer, placed on the summit of the comparative linguistic analysis of our age. Grimm's researches and discoveries have therefore exercised, and will long continue to exercise, a decisive influence on all inquiries into the organic laws of any given language which are not merely superficial. His Teutonic Grammar (Vol. IV., 1819—1837), comprehending the Scandinavian as well as German languages

in all their ramifications, reduces each of them to its most ancient forms, and traces it down from that point through the whole course of its developments. It is based principally on an almost uninterrupted series of documents through fifteen centuries of German literature, from Ulfilas to Goethe. From its method and results this colossal work forms not only an epoch in the history of Germanic philology, but of ethnological philology in general. It furnishes a standard by which every other research must be tested and all linguistic information gauged, in order to judge of its approximation to accuracy and completeness. Grimm has adopted many of the elements of the grammatical theory which we owe to the scientific knowledge of the Sanskrit language, and has shown throughout his work that precision and critical accuracy which is the great pride of classical scholarship. But he has also, in the analysis of that richest, best understood, and most thriving family of languages, employed terms and established principles which are more or less applicable to all the languages of the Japhetic, Semitic, and Chamitic tribes, and these have already been applied and followed out by Lepsius, Meyer, and others. His terminology of *anlaut, inlaut, auslaut, umlaut,* of *strong and weak declension and conjugation* and similar expressions have been found of decided use in the remotest parts of ethnological inquiry. I may be allowed to quote, as instances, Lepsius' and my own Egyptian, and Dr. Meyer's Celtic and Cymric researches, Schott's Mongolian and Rosen's Ossetic Grammar. But above all, his discovery of the law of *correspondence of sounds* (Lautverschiebung) in Sanskrit, Greek, Roman, and Gothic words, as compared with each other, is one of the most fertile and triumphant discoveries of philological ethnology. While the Schlegel-Bopp school based their proofs of the identity of the Indo-Germanic languages principally upon the systematic correspondence of their grammatical forms, Jacob Grimm discovered, what Rask's genius had already attempted, and ex-

tended to the High German the systematic correspondence in the formation of most of the principal words in Sanskrit, Greek, Latin, and German. According to this table, in the scale of the labials

the Greek	P	corresponds with the Gothic	F	and the Old German	B or (V)		
„	B	„	„	P	„	„	F
„	F	„	„	B	„	„	P

In the scale of the dentals

the Greek	T	corresponds with the Gothic	TH	and the Old German	D		
„	D	„	„	T	„	„	Z
„	TH	„	„	D	„	„	T

In the scale of the gutturals

the Greek	K	corresponds with the Gothic	H init. / G med.	and the Old German	G		
„	G	„	„	K	„	„	CH
„	X (Greek) / H (Latin)		„	G	„	„	K

This simple table exhibits a most regular, and, therefore, certainly not an accidental analogy in these languages; by which we are enabled to establish true etymologies, and, what is still more important, to get rid of very many past, present, and future, which are false. We give in Appendix A. specimens of this correspondence according to Grimm and Bopp.

Grimm's German Grammar shows the development of all the Teutonic languages, from their first appearance to the present time. Above all, he has become, by this immortal work, the founder of the doctrine of sounds (Lautlehre), of which previously scarcely the elements existed, and which, even in the Greek and Latin grammar, has not yet been so completely and satisfactorily expounded as could be desired. It is by means of this doctrine that he shows how the different Germanic dialects have gradually been evolved out of the original unity. His "Lautverschiebungsgesetz" became the test of all comparison with cognate languages.

These purely linguistic discoveries are most successfully se-

conded and applied to national history in his "Researches into Germanic Antiquities," his "Monuments of Ancient Law," and his "Mythology." It has been shown that the consanguinity and primitive community of life among the Germanic tribes, not only among themselves, but also their Iranian brethren in Asia, is not a mere empty sound, but a fact which pervades the primitive faith as well as the first civil and social institutions of these tribes. He has followed the same path in his interesting "Essay on the Practice of the Self-sacrifice of Widows by Fire," a custom heretofore supposed to be an isolated Brahminic institution. His last work, the "History of the German Language," unites all these threads into one great historical picture; and if, on its first appearance, some of its historical conjectures did not obtain the assent of men of science, we may confidently hope that its great author will have time to spare from the gigantic work, undertaken by him and his worthy brother and fellow-labourer, William Grimm, that of forming a national German dictionary, to enable him to recast that history, and render it in all respects the crowning labour of his life, and an imperishable monument of true historical linguistic philology.

4. FRANCIS BOPP.

What Frederic Schlegel had poetically sketched rather than philologically carried out, was realized by Francis Bopp in a work of prodigious learning and sagacity, his "Comparative Grammar of the Sanskrit, Zend, Greek, Latin, Lithuanian, Old Slavonic, Gothic, and German," published in six sections, between 1833 and 1852. This was the first demonstration that the forms of declension and conjugation in the ancient languages of Bactria and India, were essentially identical with those of the kindred nations of Europe, so that the key to the isolated forms which cannot be explained by the documents of these European languages, is found, according to a constant law of analogy, in

Sanskrit and Zend. As the leading features of this system will be brought before my readers in the next section, it is useless to enter here into details. It is an elevating spectacle to see the long life of a man of science consecrated to carrying out a deep and fertile idea, and producing a work of such magnitude and lasting value, exactly at the time when it was wanted.

5. EUGÈNE BURNOUF.

What Grimm did for the Teutonic languages, Eugène Burnouf, hurried away by a premature death since the first publication of this Essay, achieved for the languages of Persia. As this subject will soon be treated fully in a report upon the latest results of the Persian researches, it will suffice here to exhibit the table of correspondence which Burnouf has established for Sanskrit and Zend in his profound works, particularly his "Commentaire sur le Yaçna" (Vol. I. Paris, 1835).

The Sanskrit S (sharp dental) becomes H in Arian (as in Greek and Kymri).

„ „ Ç (sharp S) „ S in Arian (K in all the other Indo-Germanic languages, except German, where it becomes H).

„ „ H „ Z.

To this period belong also the writings of Julius Klaproth, whose "Asia Polyglotta" (1823, 2nd ed. 1829) contains valuable materials for the lexicographal comparison of many of the Turanian languages, and important researches concerning the Tatar and Turkish tribes. His neglect, however, of the grammatical element (a reaction against Schlegel) is a great drawback to the usefulness of the philological researches of this acute and ingenious man.

THIRD PERIOD OF LINGUISTIC SCIENCE.

WILLIAM VON HUMBOLDT AND HIS POSTHUMOUS WORK ON THE DIVERSITY OF THE FORMATION OF HUMAN LANGUAGE.

THE *desiderata* of Bacon, and the general plan and fundamental views of Leibnitz had, to a considerable degree, been carried out in the course of this century. By a rare combination of philosophical thought, of philological accuracy, and of linguistic research, a method had been established for analyzing a given language and detecting its affinities with another of the same family. By this process, in the Semitic, and still more so in the Japhetic languages, the general observations of preceding philosophers on the characteristics and relative advantages or imperfections of the languages of mankind had become entirely obsolete, from being in part incomplete, in part erroneous, and scientifically speaking, inaccurate. The great desideratum then was, as a first step, to unite and examine philosophically and methodically all the different forms of human language with a full knowledge of all the modern discoveries. This want was admirably supplied by the immortal posthumous work of William von Humboldt (1835), the introduction to his analysis of the Kawi language (1836). Its title is, "On the Diversity of the Formation of Human Language, and its Influence on the Intellectual Development of Mankind." Beginning with the simplest elements of speech, the illustrious author gradually proceeds to the construction of a sentence, as the expression of intellect and thought. He then shows that the Chinese is a perfect form in its kind. In examining, explaining, and comparing the different means used by different nations to render single words susceptible of signs, destined to mark their posi-

tion in a sentence, he shows that all accomplish this, more or less imperfectly, with the exception of the Sanskritic family, in which he gives the prize to the language of the Hellenes. Thus he is brought at last irresistibly to the result, that the Chinese language and the Sanskritic family represent the two extremes of all known formations of speech. With respect to the Semitic languages, he considers them as standing on the same line with the Sanskritic, in consequence of their decided tendency towards the system of inflexional forms; other formations necessarily occupy, according to him, a place between those two extremes.

In following out this great plan of comparative philosophy respecting all the different phenomena of language, he does not enter into a particular consideration of the historical problem which is to occupy our attention. He considers it *possible* that the different classes of formations constitute, as it were, the stages of a continual development. It is also possible, he conceives, that such different formations may be accompanied by historical affinities, arising out of a common origin. But, he adds, this must entirely depend upon historical research*: a question into which he does not enter, nor the method of such an inquiry. He not only abstains from the historical investigation, but seems to declare, in another passage, that a complete and satisfactory classification of all languages is an impossibility, on account of the numberless varieties of formations†. In another, later passage of his work, he expresses his doubts whether there may not be a radical connexion between the Chinese and Burmese languages‡, and gives some remarkable instances even of grammatical affinities. Now, should such a radical affinity be established, it is clear that an immense step would have been made towards proving that the languages of the great majority of mankind have a common

* § 5. p. xxxv. § 7. p. lxiii. † § 24. p. cccxlvi. ‡ Ibid. p. cccIxxxviii.

origin. Humboldt, therefore, was far from denying such a possibility. Under these circumstances we think it safest to express the final result of his researches in the very words of the concluding sentence of his great work. These remarkable words are as follows:

"The result of what has been developed hitherto is this, as far as the expression of grammatical relations by particular signs, and the syllabic extent of words is concerned. If we consider the Chinese and the Sanskrit languages as the extreme points, there is in the other languages lying between those points, whether they keep the syllables separate, or attempt imperfectly to amalgamate them, a gradually increasing tendency to make the grammatical expression more visible, and to unite syllables to words more freely."

To have established this great result by a scientific method, with copious, sound, and thoroughly digested materials, constitutes, in my opinion, the lasting value of a work, which claims, besides, an eminent rank as being the concentration of the thoughts and researches of a man of sound judgment and profound learning, who had dedicated a great part of his active life partly to speculations on language in general, partly to a critical and detailed analysis of a variety of tongues. As to its bearing upon the great historical problem before us, although, as already observed, the author purposely refrains from entering upon the general question of the original unity or diversity of races and languages, his work will nevertheless be found to point out the most valuable landmarks for all who are bold enough to sail on this wide and dangerous ocean. Its researches belong to the *Calculus sublimis* of linguistic theory. It places William von Humboldt's name in universal comparative ethnological philology by the side of that of Leibnitz.

FIRST SECTION.

THE LINGUISTIC AND ETHNOLOGICAL RESULTS OF THE MOST RECENT IRANIAN, SEMITIC, AND CHAMITIC RESEARCHES OF HISTORICAL PHILOLOGY.

WITH William von Humboldt's posthumous work commences a new period for the great science of the philosophical history of language, and consequently of the primitive stage of our race's development. In my lecture of 1847, I accordingly stopped there, contenting myself with illustrating single points of my theory and method of historical investigation and the general results I had ventured to draw from those materials, by reference to some isolated researches of the last few years, including my own.

Since that time six years have elapsed, and much of what was then mere conjecture has been matured into a demonstrable fact. Whatever has been successfully achieved during that time on behalf of linguistic science, has been obtained by the critical method of philological analysis. While valuing all materials for what they are worth. I do not think that crude glossaries of languages not understood are proper materials for comparative ethnology, and I consider all conjectures and systems built upon such materials as below scientific consideration.

It is also, I think, now more generally acknowledged, and indeed proved by incontestable facts, that all critical philological results must remain incomplete and imperfect until they become historical. All philology must end in history; but the historical

results of those linguistic researches are infinitely greater than many learned historians imagine, and more important even than many of the authors of such researches have anticipated. It seems to me time to bring before the cultivated European mind a comprehensive sketch of those results, first linguistically and ethnologically, and then from the point of view of universal history. If I succeed in convincing my readers of the great results of comparative philology for the universal history of man and the philosophy of the human mind, they will necessarily feel the want of a comprehensive philosophical method for this science. It is this conviction which has emboldened me to call upon my younger friends and fellow-inquirers in this path of investigation to assist me in laying before the public the last results of scientific analysis in those different branches of linguistic research which have been treated according to the principles of historical philology.

If we examine the last of these inquiries we shall find that those only which belong to what may be termed centrical ethnology, based upon comparative philology, have furnished any conclusive result. Almost all languages of nations which have a history and a literature have been linguistically traced to Central Asia, and the only natural method which can insure real progress appears to be to increase this stock, by confronting progressively isolated phenomena with the now historical centre. But this must be done methodically. Wherever, in Asia, in Europe, in Africa or elsewhere, we find family-groups of languages, we must, first of all, try to define the respective position of each member or relation to the other portions of the same family. We then shall have to ascertain methodically the relative position of the different families. This relative position is a double one. First, that of the members among each other. Thus we shall gradually obtain African, American, and Polynesian groups, organically arranged, and prepared for being elevated into the sphere of universal history. To find the proper place for each group in the general

history of tongues, is the second aim of this comparative examination. In order to obtain the desired results for both purposes, a twofold critical operation is required. First, a grammatical analysis of every single language, based upon native composition and speech, and undertaken by men conversant with the principles of ethnological philology. The second operation will be, to gather round a common centre all such languages as by their grammar and construction undeniably belong to one and the same family, and to endeavour to discover which of its branches exhibits the idiom in its greatest purity and perfection. The most ancient and best preserved must be placed at the head, as the representative of the family in the history of mankind.

It is only when we have reached this point that we may knock at the door of universal history and demand admission for the hitherto isolated family into the historical stock, whether it be (as I believe it will turn out) on behalf of a distant relative or a collateral branch of one race—the human species.

The philological facts with which we open our researches will be entirely confined to the languages of Asia and Europe, including only two great Asiatic deposits in ancient Africa, the Egyptian and the Abyssinian.

The first section will lay before the reader in six chapters the last results of the researches bearing upon the origin and history of the Arian and Semitic languages.

The first chapter will begin with a notice of the last results of the *Germanic* researches, in their widest sense, as comprizing all the members of the Teutonic stock. This is the safest as well as nearest field, and the most accessible to all my readers.

We shall then proceed to the *Italic* researches, and point out the result of the interesting and important inquiries first critically established in this department by Niebuhr and Otfried Müller.

From the Italic researches we shall pass on to the *Arian* or Persian and Indian researches, in which the last ten years have produced particularly interesting results; and from thence to

the *Celtic* family, as being the most ancient, and as it were most remote, of the Indo-European or Arian stock.

The sixth and last chapter will be consecrated to the most recent results of comparative *Semitic* or Aramaic philology, including the Chamitic researches.

The successful researches of Prof. Max Müller enable us to point out, in the second section, the progress of our science as regards all the languages of Asia and Europe which are neither Semitic nor Arian. I ventured in 1847 to unite all these under the name of Turanian. Prof. Müller's discoveries will prove the truth of this view beyond the most sanguine hopes which could then be conceived. Moreover, the assumption of a connexion between the Turanian and the Chinese will be shown to be far from imaginary, although it is certain that the same opposition exists between the two as there is between inorganic and organic life.

Assuming these facts to be proved, we obtain a safe philological basis for some striking results respecting the universal history of mankind. We here only formulize two:

First: The languages reducible to a common centre in High Asia, are the only languages which possess a literature and have a history.

Second: The nations who speak them are the only tribes who have hitherto taken a place in the history of the world.

To complete and apply those philological proofs to universal history, we must, however, first attempt to establish the principles of a philosophical analysis of language, as to its origin, progress, and decay. Both these researches, the philosophical and the world-historical, will be reserved for the second volume of our sketch.

We now begin the philological statements as to the Arian and Semitic families.

FIRST CHAPTER.

THE LAST RESULTS OF THE GERMANIC RESEARCHES.

(Reported by Dr. AUFRECHT, Oxford.)

ALL comparison of Germanic tongues with cognate languages must originate in Gothic. Not as though the other dialects were dependent upon the Gothic, or of inferior importance, but because we possess the Gothic translation of the Bible of the fourth century, and no literary document of the other German tribes before the eighth. In this period the vowels underwent most important changes, particularly through the *umlaut*, a phenomenon, the real nature and general law of which we shall endeavour to fix with greater precision than has been done hitherto. The consonants, likewise, were exposed to changes and corruptions. But, above all, the flexional forms suffered considerably in those four hundred years. In this state of things the Gothic serves us as a standard, because it enables us to reduce the irregularity to a law, the exception to a rule, the difference of dialects to something common to all, to clothe with flesh such forms as have shrunk to a skeleton, and to infuse into them new life. The Gothic is for the Germanic languages what the Sanskrit is for the Indo-European languages in general; each in its own sphere is most perfect and transparent, although they both, on the other hand, receive from their sister-tongues light and illustration. In some instances, the Gothic is even surpassed in purity by the forms of other Germanic dialects, just as Greek and Latin, in single points, have preserved the primitive form more faithfully than the Sanskrit.

We shall first concentrate the most decisive proofs of the identity and common origin of the Teutonic languages among

themselves, and with the Sanskrit and classical languages. We shall deduce these proofs from the numerals and from some characteristic traits in the system of declension and conjugation, and then bring forward still more striking facts from the most primitive words of these languages, in order to show how comparative philology introduces us into the sanctuary of the primitive religious, social, and political life of the noblest tribes of mankind, and gives us facts instead of conjectures—reality instead of dreams.

I.

The Numerals.

We compare the first cardinal numbers in Gothic, on the left with Greek and Latin, on the right with Lithuanian and Sanskrit.

	Greek.	*Latin.*	*Gothic.*	*Lithuanian.*	*Sanskrit.*
1.	οἴνη (acc.),	Oinos,	Ains,	Wiênas.	
2.	δύο,	Duo,	Tvai,	Du,	Dvau.
3.	τρεῖς,	Tres,	Threis,	Trỹs,	Trayas.
4.	τέτταρες, πίσυρες,	Quatuor, *Umbr.* Petur,	Fidvôr,	Keturi,	Catvâras.
5.	πέντε,	Quinque, *Osk.* Pumpe,	Fimf,	Penki,	Panca.
6.	ἕξ,	Sex,	Sĕhs,	Szeszi,	Shash.
7.	ἑπτά,	Septem,	Sibun,	Septyni,	Saptan.
8.	ὀκτώ,	Octo,	Ahtau,	Asztůni,	Ashtau.
9.	ἐννέα,	Novem,	Niun,	Dewyni,	Navan.
10.	δέκα,	Decem,	Tĕhun,	Deszimtis,	Daçan.

II.

Declension of the Noun, and Degrees of Comparison.

The primitive sign of the nominative, *s*, has been retained in Gothic in the same places where it is preserved in Greek and Latin. Compare

	Greek.	*Latin.*	*Gothic.*
m.	λύκο-ς,	Lupu-s,	Vulf-s (wolf).
,,	πόσι-ς,	Poti-s,	Fath-s (master).
,,	πῆχυ-ς,	Fructu-s,	Sunu-s (son).
f.	πόλι-ς,	Navi-s,	Quen-s (wife).
	γένυ-ς,	Acu-s,	Kinnu-s (chin).

The gen. sing. terminates throughout in *s* (vulfs, vulfis).

Here, for instance, the identity of formation is very remarkable in the feminines terminating in *a:*

Greek.	*Latin.*	*Osk.*	*Umbr.*	*Lithuanian.*	*Gothic.*
σκιᾶς,	Familiâs,	Tovtâs,	Totâs,	Dienôs,	Thiudôs;

from σκιά, familia, tovta (country), tota (country), diena (day), thiuda (people).

The acc. sing. has in all German tongues lost its primitive *m*; in the acc. pl. the Gothic represents even a more ancient point of development than any of the cognate languages. The primitive termination of this case is *ns*. Now the Greek ους stands for *ονς*, as τύπτουσι for τύπτονσι; the Latin *ôs* has likewise rejected the *n*, and by way of compensation made the *o* long; in the Oscan *oss* the *n* has been assimilated to the *s*. The Sanskrit has dropped the final *s*. The Argivian and Cretic dialects alone have forms like τόνς πρειγευτάνς, for τούς πρειγευτάς (πρεσβευτάς). In Gothic, on the contrary, the primitive *ns* has, as a rule, been preserved. Compare

Gr.	*Cretic.*	*Latin.*	*Osk.*	*Lituan.*	*Sanskrit.*	*Gothic.*
λύκους,	λύκονς,	Lupôs,	Luposs,	Wilkûs,	Vĕrkân,	Vulfans.

The nom. acc. pl. of the neuters ends in *a*. Compare

	Greek.	*Latin.*	*Gothic.*
Sing.	γόνυ,	Genu,	Kniu.
Pl.	γοῦνα, for γόνϝα,	Genua,	Kniva.

As to the degrees of comparison, the comparative ends in *iza, oza*. We shall show in the report on the Italic languages that this stands for *isa, osa*, and agrees with the Latin *ior* for *ios*, and the Greek ιων for ιονς. The superlative has *ists*, identical with ιστος. Compare

Greek.	*Latin.*	*Sanskrit.*	*Gothic.*
ἡδύς,	Suavis,	Svâdus,	Sutis.
ἡδίων,	Suavior,	Svâdîyans,	Sutiza.
ἥδιστος,	- -	Svâdishthas,	Sutists.

III.

The Verb.

As regards the verb the German languages have suffered severely. They have only rescued two tenses, the present and perfect, and have been obliged to supply the others by a composition with auxiliary verbs. The Gothic is distinguished also in this respect more than

the other dialects, by having a dual as well as some remains of a passive formation. The personal terminations and the distinctions of moods, again, are in exact harmony with the Greek and Latin. Compare in pres. ind.

Greek.	*Latin.*	*Gothic.*
ἔδω,	Edo,	Ita.
ἔδεις,	Edis,	Itis.
ἔδει(π),	Edit,	Itith.
ἔδομεν,	Edimus,	Itam.
ἔδετε,	Editis,	Itith.
ἔδουσι, *Dor.* ἔδοντι.	Edunt,	Itand.

And in pres. conj., which answers to the Greek optative

Greek.	*Gothic.*
ἔδοιμι,	Itau.
ἔδοις,	Itais.
ἔδοι,	Itai.
ἔδοιμεν,	Itaima.
ἔδοιτε,	Itaith.
ἔδοιεν,	Itaina.

In the participle pres. we have

ἔδων (from ἐδοντ-s), Edens (from edent-s), Itand-s.

The first person of the pres. ind. terminated originally in *mi;* e. g.,

Greek.	*Skr.*	*Lit.*
δίδωμι,	Dadâmi,	Dûmi.

An old High German conjugation has preserved *m* throughout; e. g. hapêm (habeo), manêm (moneo). This is also the case in our *I am,* where *m* has kept its place for thousands of years through all destructive changes. The reduplication of the perfect, which in Greek is constant, in Latin only occasional (as tundo, tutudi; pello, pepuli; tango, tetigi), is not unfrequent in Gothic. Compare

Stautan (to push), staistaut.
Fahan (to catch), faifah.
Tekan (to touch), taitok.

A like system of reduplication extended originally through all the German dialects, but became mutilated at a very early date. Who would suppose that the preterites *I let, I held,* or the German *ich fieng* (I caught), are reduplicate forms, if we had not the Gothic *lailôt, haihald, faifah* to compare with them?

This is sufficient to prove, beyond the possibility of a doubt, the original identity of Germanic inflexional forms with those of the two classical languages, and to establish the Teutonic as one of the noblest links in the chain of the Indo-European development.

Not less convincing are the proofs furnished by Bopp, Grimm, Graff, and others, as to the identity of the *Germanic roots and words.*

Dieffenbach, in his Gothic dictionary, compares, with critical acumen, the totality of the Gothic words and the corresponding forms in the other German dialects with the cognate languages. Grimm's law furnishes the test for deciding whether any apparent agreement is real.

It is superfluous to adduce proofs of a fact which no man in his senses can doubt. But there is a circumstance which, to a superficial observer, may appear startling. There are some very simple and primitive notions for which the Gothic has not the same words which we find in the cognate languages. Compare

Gr.	*Lat.*	*Lit.*	*Sanskr.*	*Gothic.*
δίδωμι,	Do,	Dûmi,	Dadâmi,	Giba (I give).
πί-νω	Po-to	Pû-ton	Pibâmi	Drigka (I drink).
(πέπωκα),	(Bibo),	(Old Prussian),	(Pâmi),	
τίθημι,	Do (in con-do),	Dĕmi,	Dadhâmi,	Tauja (I do). or satja (I set).
εἶμι,	Eo,	Eimi,	Êmi,	Gagga (I go).
εἶδον,	Video,	Wydau,	- -	Saihva (I see).
κλύω,	Clueo,	Klausu,	Çraumi,	Hausja (I hear).
ζεύγνυμι,	Jungo,	Jungiu,	Yunajmi,	Binda (I bind).

This fact, however, when examined a little more closely, is capable of easy explanation. It is natural to suppose that, for such simple notions, language had originally more than one expression derived from different sensations. One of these predominates in one branch, another in another. We find sometimes the fragments of these different denominations preserved in the different tenses of the verb, in one and the same language; as in the Greek, ὁράω, ὄψομαι, εἶδον. But we can also prove that the German really possessed the roots which are apparently lost, *dhâ, pâ, i, vid, klu, yug.* These appear clearly in their derivatives. From *dhâ* comes

Goth. *dêds*, Engl. deed; from pâ is derived Old Norse bjór, Ang.-S. beór (beer); *i* is preserved in the Gothic irregular preterite, *iddja*, belonging to the infinitive *gaggan*, to go (gang). *Vid* is found in *vitan* (to know; whence, to wit), where it need only be observed that, like the Sanskrit *vid*, the word has already assumed the later signification (to know, instead of to see). As to *hlu*, we meet with it in the Goth. *hliuma* (hearing); as we do with *yug*, in Goth. *juk*, Ang.-S. *geoc* (yoke). Thus, *dâ* only remains unexplained; a root, from which but very few derivations are formed even in Greek and Latin.*

It may not be unimportant to remark, that certain roots bear a particular signification only in the Germanic and Lettish-Slavonic family. These are

Lit.	*Slav.*	*Gothic* (*Norse, or Ang.-S.*).
Valdau,	Valda,	Valda (I govern).
Moku,	Moga,	Mag (I can).
Lubiju,	Ljubiti,	*Ang.-S.* Lufege (I love).
L'gati,	- -	Liuga (I lie).
		Gothic Lauths.
		Ang.-S. Leod (men, leute).
„	Ljud,	*Norse* Ljódh.
„	Dolg,	Dulgs (debt).

After having thus established the relations between the Gothic and the cognate Asiatic and European families, we must say a word respecting the relation of the other Germanic languages to each other, and ultimately to the Gothic. They must, according to the relative position of their consonants, be divided into two great classes. To the first belongs the High German, which alone has continued the process of the change of sounds commenced in the Gothic compared with the Sanskrit, as is shown in the table of Grimm's law. All the other tongues belong to a second class; the Old Norse, the Anglo-Saxon, the Old Saxon, the Frisian, the Netherlandish or Dutch. In both classes severe losses have been suffered, great changes have taken place. Of these changes we propose to consider

* On the other side, we find this root in the Egyptian *ti*, and, slightly disguised by the triliteralism, in Hebrew. (See Semitic Appendix.)—BUNSEN.

one more particularly, the *umlaut*, because it affords an interesting example of two languages, divided for thousands of years, being still united in employing that peculiar contrivance. We propose to consider it under the historical point of view.

The true definition of *umlaut* seems to be this, that an *A* in the radical syllable has become altered, and, as it were, dimmed by the influence of an *I* in the next syllable. As a consequence of this influence, the *A* becomes mixed with an *I*, but without a diphthong being produced. If e. g., Goth. *badi* (bed) becomes, in Old Norse and Ang.-S., *bed;* in Old High German, *betti;* we must explain this as if it were *ba-i-di;* that is to say, as an approximation of *A* to *I*. This phenomenon has gradually caused the disappearance of a number of *A*-sounds, particularly in the Old Norse. Here, by the influence of a following *I*, not only *A* becomes *E*, but *á* also *æ*, *ó œ*, *û ý*, *au ey;* besides, *A* is transformed by a following *U* into *Ö*. Thus, e. g., the Gothic *vandus* (rod) becomes *vöndr;* or, as it is written in the most ancient MSS., *vaundr*. This law explains the multiplicity of the vowels in declension. We shall show this by the juxtaposition of Old Norse *mögr*, and the Gothic *magus* (son).

	Sing.			*Plur.*		
N.	Mögr,	*Older form*	Magus.	Megir,	*Older form*	Magir.
G.	Magar,	„	Magas.	Maga,	„	Maga.
D.	Megi	„	Magi.	Mögum,	„	Magum.
A.	Mög	„	Magu.	Mögu,	„	Magu.

It is in consequence of the same law by which feet is formed from foot; teeth, from tooth: in Anglo-Saxon it is *fôt, fêt; tôd, têd: fêt* and *têd* are derived from *fôtis, tôdis*, by the power of the umlaut. Now, this same phenomenon Burnouf has proved to exist in Zend, where an *a* is changed, by a following *i, y, e,* into *ai;* by *u,* to *au* or *ó*. Thus, the Sanskrit "bhavati" becomes in Zend *baviati;* "madhya," *maidyha;* "nare," *nairê;* "taruna," *tauruna;* "vasu," *vôhu.*

The above and similar instances of agreement prove that these tribes must have lived together a considerable time, at a comparatively recent age of ancient history; indeed the immigration into Europe is, comparatively speaking, a recent event. It is a fact, that, as Greek

and Latin are more intimately connected with each other, so the Germanic and Slavonic tribes were in contact for a longer time, and immigrated into Europe at a comparatively contemporaneous period. This accounts also for some words being introduced from Slavonic into German, and *vice versâ*. It would almost seem as though the Germanic tribes had received if not the first, at least a secondary, instruction in agriculture from the Slavonics. Our plough (*pflug*) is not our own, but is borrowed from the Slavonic *plug*.*

We have thus already reached the historical ground to which we were tending. Upon entering into the subject of primitive national life, we find that the words expressive of the nearest family relations, those for domestic animals, for the simplest articles of food, for metals, for the great luminaries of the sky and similar striking phenomena of nature, and the object or objects of religious worship derived from these great phenomena, agree in most, frequently in all the branches of the Indo-Germanic family. It is impossible not to see in this as direct proof of domestic communion in a peaceable, patriarchal, pastoral, and even agricultural life, as we possess of any event in history. This becomes still more significant, if we add the negative consideration: that the names of wild animals are, with few exceptions, different in those various branches; as are also most of the words expressing the instruments of war.

We shall bring this curious and undeniable fact before our readers in some comparative tables, in which we intend to restrict ourselves to such cases as can be proved by undeniable analogy, or as are self-evident from their perfect identity.

A.

THE WORDS FOR FAMILY RELATIONS.

1. *Father and Mother.*

Greek.	*Latin.*	*Germanic.*	*Sanskrit.*
πατήρ,	Pater,	Fadar,	Pitar.

"the nourisher," from the root pâ. Compare pabulum, pasco.

* Tacitus (Germ. c. 48.) states that the Northern Germanic tribes, the Quadi, for instance, borrowed largely from the Sarmates, who are the ancient Slavonics. —BUNSEN.

Greek.	*Lat.*	*Germ.*	*Skr.*
μήτηρ,	Mater,	Môdar,	Mâtar,

"the generating, producing," from the root *mâ*. In the Vedas *mâtar* is still used as an adjective, in the sense of creating. Professor Buschmann, of Berlin, has supposed that the well-known fact of *pâ* and *mâ* signifying in many other languages father and mother, is a proof that in the Indo-Germanic languages we have also to deal with simple imitations of sounds which have no logical signification. This is a very narrow view. The whole idea of the imitation of the sounds of nature being the basis of speech is an absurdity. *Pâ* and *mâ* may be interjectional sounds in some savage tongues, but the Indo-Germanic mind used them as expressions of thought, and stamped upon a sound of undefined meaning that notion which led to *pâ-tar* and *mâ-tar*. This was the work of the creative plastic power of mind.

2. *Son and Daughter.*

Greek.	*Lat.*	*Germ.*	*Skr.*
υἱός,	- -	Sûnus,	Súnus.

"the born," from the root *sû*, parere. The Latin filius, filia, stand apart; their meaning is, "the sucking ones," and they are cognate with the Greek θῆλυς and τιθήνη. Fellare is a decent Old Latin expression for "to suck." Varro said, "fellare lac humanum." The Umbrians sacrifice "sif feliuf," sucking pigs.

θυγάτηρ,	- -	Dohtar,	Duhitar.

The Sanskrit signifies either "she who milks;" or, "she who sucks."

3. *Brother and Sister.*

φρατήρ,	Frater,	Brôthar.	Bhrâtar.

"he who maintains, takes care of (the sister and mother)." We have the same word in Greek (φρατήρ), but there it signifies the member of a corporation (of a brotherhood). The word for brother, ἀδελφός, ἡ, is identical with the Sanskrit *sagarbha*, "come from one womb."

,,	Soror,	Svistar,	Svasar.

Here the etymology is obscure. The identity of the collateral words leaves no doubt as to the existence of an analogous root. The possi-

bility of the Greek ὄαρ, wife, being the same word, I throw out merely as a conjecture; but it is not so wild a one as it may at first sight appear. The regular form of *svasar* in Greek would be ϝᾱ́αρ, which, enfeebled, sounds ϝᾰ́αρ. Two spirants cannot come together: thus ϝᾰ́αρ becomes regularly ϝόαρ, and thence ὄαρ. But what is the meaning of *svasar?* Most probably something connected with sva, suus, ὅς, Goth. svês (property): consequently that which belongs or is attached to something. The metamorphosis of *soror* into "cousin" is certain, and still more startling. Cousin is a corruption of consobrinus, which comes from soror, although not even the principal part of sor-or is preserved in this instance.

4. *Husband and Wife, Widow and Orphan.*

Greek.	*Lat.*	*Germ.*	*Skr.*
πόσις,	Potis,	Faths,	Pâtis.

"the lord, ruler" (just as husband = house-lord). The Latin *potis* survives in the adj. = potens. "Quis potis ingentes oras evolvere belli" says the poet Ennius, who had not quite forgotten his Old Latin. Possum, pot-es, is potis sum, potis es. Potior, potissimum are gradations of it. This same patis, potis, forms the latter part of hospes, hospitis; a word, the original meaning of which seems to be the "lord of food." It is curious, that the Latin and Slavonic languages only have this evidently old term for ξένος. All Slavonic dialects have the word in the form "gospodi," and so on. The Lithuanians have *patis* in the sense of a "lord," and also as a pronoun = ipse. The feminine form, corresponding with patis, is the Greek, πότνια; Skr. *patnî:* we meet with it, somewhat disguised, in δέσποινα; Skr. *dâsa-patnî,* "she who rules," gebieterin.

„	Vidua,	Viduvô,	Vidhavâ.

"she who is without her husband." Skr. *vi-dhavâ* is, literally, "a wife bereaved of her husband." "A widower" is unknown in the original language; and, etymologically analysed, would signify, "he who has no husband." Χῆρος, χήρα, means "he, she, who is bereaved."

ὀρφανός,	Orbus,	Arbja,	Arbhas.

The Gothic word signifies "the heir;" and the Skr. *arbhas* means, as an adjective, "small;" as a substantive, "child in general."

5. *Consanguinity and Affinity.*

Greek.	*Lat.*	*Germ.*	*Skr.*
ἀνεψιός,	Nepos,	Nefo,	Napât, nap.
ἀνεψιά,	Neptis,	Nift,	Naptî.

"the connecting," or "the connected." *Napât, nap,* means child, generally. In Skr. a relation is called *bandhus,* "he who is connected" (der verbundene).

ἑκυρός,	Socer,	Svĕhra (Schwiegervater),	Svaçuras.
ἑκυρά,	Socrus,	Svĕhrô (Schwiegermutter),	Svaçrûs.

for these no etymology has as yet been found.

νυός, ἐννυός,	Nurus(*Ital.* Nora),	Snûr (Schnur),	Snushâ.

"the connected."

γαλόως,	Glos.		
γαμβρός,	Gener,		
δαήρ,	Levir,	Tâcor	Dêvar.
εἰνάτηρ,	Janitrix.		
γυνή,	- -	Quens (Queen),	Gnâ.

"she who brings forth children." "The queen" is therefore "mater," κὰτ' ἐξοχήν, as it were, "landesmutter." In the same manner, "king," in Anglo-Saxon "cyning," in Sanskrit "janaka," means originally "the father," and contains the same root as the Latin "gignere."

B.

THE WORDS FOR THE DOMESTIC AND SOME OTHER ANIMALS.

	Greek.	*Latin.*	*Germ.*	*Skr.*
Beast,	πῶυ,	Pecu,	Fĕhu (Vieh),	Paçu.
Horse,	ἵππος,	Equus,	Ĕhvs,	Açvas.

In the Latin form *epus* must have existed besides, as appears from the name of the goddess Epona, and the noun proper, Epidius. In Old Persian it was changed to *asp:* hence *aspes* as a termination in many nouns, as Hystaspes.

Steer,	ταῦρος,	Taurus,	Stiurs,	Sthûras.
Ox,	- -	- -	Ŏhsus (ox),	Uxan.

Uxan stands for vaxan; it is probable, therefore, that its fem. is retained in the Latin *vacca.*

Bull,	βοῦς,	Bôs,	Kû,	Gaus.

	Greek.	*Lat.*	*Germ.*	*Skr.*
Foal,	*πῶλος,*	Pullus,	Fûl.	
Dog,	*κύων,*	Canis,	Hunds,	Çvan.
Sheep,	*ὄϊς,*	Ovis,	Avis,	Avis.
Pig,	*πόρκος,*	Porcus,	Farh.	
Sow,	*ὗς, σῦς,*	Sus,	Sû,	Sû-karas.
Boar,	-	Aper,	Ebar.	
Boar-pig,	-	Verres,	- -	Varâhas.
He-goat,	*κάπρος,*	Caper,	Hafr.	
Kid,	-	Hoedus,	Gaitei.	
She-goat,	*αἴξ,*	- -	- -	Ajâ.
Ass,	*ὄνος,*	Asinus,	Asilo,	
Stag,	-	Cervus,	Hiruz.	
Mouse,	*μῦς,*	Mus,	Mûs,	Mûsh.
Bird,	-	Avis,	- -	Vis.

(In Greek it exists in *οἰ-ωνός*, eagle.)

Goose,	*χήν,*	Anser,	Gans,	Hansas.
Duck,	-	Anas,	Anut,	Âtis.
Raven,	*κόραξ,*	Corvus,	Hrafn.	
Wolf,	*λύκος,*	Lupus,	Vulfs,	Vĕrkas.

The Latin *vulpes* is cognate. The Samnites are reported to have called the wolf, irpus. I suppose the word to have been virpus, which is perfectly analogous with the Skr. *vĕrkas*, Lit. *wilkas*.

Bear,	*ἄρκτος,*	Ursus,	- -	Ĕrkshas.
Otter,	*ἔνυδρις,*	- -	Ottar,	Udras.
Serpent,	*ἔχις,*	Anguis,	- -	Ahis.
Worm,	-	Vermis,	Vŏrms,	Kĕrmis.
Fish,	-	Piscis,	Fisks,	- -

D.

THE WORDS FOR CORN AND METALS.

	Greek.	*Lat.*	*Germ.*	*Skr.*
Spelt,	*ζέα* *	- -	- -	Yavas. [plants).
Wheat,	-	- -	Hvaitei,	Çvetâ (various
Corn,	-	Granum (the same word as corn, kern).		
Barley,	-	Hordeum,	Gersta.	
Gold,	*χρύσος,*	- -	Gulth,	Hiranyam.

* *ζέα* for *ζέϝα*; ζ corresponds to Sansk. y, Lat. j, just as in *ζύγον*, yugam, jugum.

The Latin *aurum* belongs to the same root as aurora, "the shining."

	Greek.	*Lat.*	*Osk.*	*Germ.*	*Skr.*
Silver,	ἀργύριον,	Argentum,		Aragetom,	Rajata.
Brass,	-	Aes,	Ais,		Ayas.

The most ancient form in Latin was *ahes;* from which aheneus, and the Umbrian form of the same, ahesnus, which is almost literally the German ehern.

There is no analogy between the names of the other metals.

We now come to the most difficult, but also the most interesting research — the origin of religious expressions. The national Iranian religions originate, according to the evidence of their language, in the worship of the natural powers and the phenomena of nature, combined with the psychological element. Fire in its powerful agency, both destructive and beneficent — the lightning darting from heaven, and the thunder-stroke which follows it — the alternate change of day and night — the transition from the fine season to winter — the revival of nature in spring — but, above all, the sky with its great luminaries — these, and similar striking phenomena, were to them not the cause of worship, but the symbols and representatives of that Supreme Being and First Cause whose image, however travestied, was impressed upon their minds, as well as those of a number of superior ideal Beings, either friendly or hostile to man. The theogony became more or less rich in proportion as the sense of those phenomena and changes was more acute, and the power of referring them to their respective causes more defective. Gradually these primitive notions were divested of the sensuous element which had led to their expression; and the necessity of connecting and bringing them into a certain order and dependence, produced a host of myths, in which the origin is disguised, until historical philology tears away the veil. We may, however, assert that all the Indo-Germanic nations have the fundamental texture of their mythology in common, and that they all possess one common point of departure, the original perception of natural phenomena. Hence, we can explain, not only the harmonious agreement between

the religious rites and myths of the different members of that great family dispersed all over Asia and Europe, but also the identity of the names of their original deities. To begin with the name of the highest god: it is identical in all, and reducible to an apperception as simple as it is profound; Ζεύς, Διός; Jovis; Old Lat. and Osk, Djovis; Goth. Tius, which is preserved in our Tuesday (Ang.-S. Tivesdäg); Skr. Dyaus, "the resplendent starry sky." Ζεὺς πατήρ is Diespiter, Jupiter = Ju-pater = Skr. Dyaushpitâ. Likewise Old Norse, tivar, "the gods;" θεός, deus, Skr. deva (god, and, as adj. "resplendent"). But even the Latin "sub divo" proves that the original meaning survived in the language.

The name of the great Germanic god, the son of Odin, Old Norse Thórr, Old High Germ. Donar, "god of thunder," is the Latin tonitru, Skr. tanyatu (thunder). But still the pyschological or rational element is not wanting. The divine *Mannus*, the ancestor of the Germans, is absolutely identical with *Manus*, who, according to an ancient Indian mythology, is the god who created man anew after the Deluge, just as Deucalion did. His name signifies "the thinking," and comes from the same root as μένος, Skr. manas, the Latin mens, whence Minerva = Minesva "the mindful." (Compare μέμονα, memini.) According to Indian tradition, and in perfect agreement with the etymology, men are called *manusha*, from manus, exactly as the German *mensch* (Old High German, mannisco), is derived from Mannus.†

* The etymology of *God* is obscure. It cannot be derived from *good*; still less can we compare it with the Persian *khoda*, which comes from *sva-datta*, "he who establishes himself." The Gothic form *guth* may be connected with the name of the Goths. Some persons have connected it with the English "to get" (Angl.-S. getian), without considering, that the *th* cannot have been developed from the *t*.

† The common word for man in all German dialects is *manna*, containing the same root as Skr. *manusha* and *manushya*. The Latin *homo* is intimately connected with humus and χαμαί, and means the earthborn; ἀνθρώπων χαμαιγενέων, says Pindar. But what is ἄνθρωπος? Nearly as many etymologies of it exist as etymologers. My own opinion is, that we must divide it into ἄνθρω and ὤψ. The first I suppose to be an adverb formed from ἀνα, and the affix tra, as we have it in intra, extra, ultra; in Sanskrit, tatra (there), yatra (where), devatra (between the gods). The aspiration of the *t* was effected by the influence of the following ρ, exactly as it is found in κλεῖθρον, μέλαθρον, μέλπηθρον, ῥέεθρον, com-

The same identity is found in the names for the Sun, Moon, Stars, as the following list will show.

E.

SUN, MOON, STARS, SKY, AND GODS.

Sun, ἥλιος, Homer ἠέλιος, Dor. ἀέλιος.

According to Hesychius, ἀϝέλιος was the Cretan form of ἥλιος: this ἀϝέλιος stands for αὐσέλιος, and exhibits a great similarity to Etrusk. usil; in Lat. it is preserved in the name of the family of the Ausel-ii (Aurelii).

	Lat.	*Germ.*	*Skr.*
Sun,	Sol,	Sôl,	Sûrya.
Moon,	- - -	Mâno,	Mâs.

The same word was originally the expression for month. Gr. μήν, Æolic μείς, Lat. mensis, Gothic mênôths, Skr. mâsas. Both words come from the root mâ (to measure). In ancient times, the periodical return of the new moon furnished the simplest means of measuring time.

Luna stands for Lucna, and is identical with lucina, from lucere. On an Etruskan mirror the goddess of the moon is called *Losna*= Loçna. Σελήνη exhibits the same root as σέλας and Σείριος (sol), that is to say, "to shine." Ἑλένη is identical with Σελήνη (Compare ὗς = σῦς) "the resplendent:" there is very probably a mythological relation between them.

Dawn, Ἕως, Hom. ἠώς, *Dor.* ἀώς, *Lak.* ἀθώς, ἀϝώς; *Lat.* aurora; *Skr.* ushâs; is the same root as we have in the Germanic ôstan (east, from which comes Easter).

Star,	ἀστήρ,	Stella,	Stĕrno,	Star.

Here the Greek has preserved the most perfect form; the root is *as*, "to throw." *Astar* is the Sanskrit word for huntsman, marksman (Schütze). The stars throw out beams (in German, "strah-

pared with μέτρον, θέατρον, ξύστρον. The α in the middle of the supposed ἀνάθρω, is dropped as in ἄνδιχα, ἀντολή, ἄνθετο, &c.; ἄνθρωπος is, according to this explanation, the same as ἄνω τρέπων τὴν ὤπα, he who turns his face upwards, in contrast with the brutes, which are looking downwards, or κατωποί.

len," in Old High German, strâla, is only "arrow"), and in the Indo-Germanic languages beams and arrows are often expressed by the same word.

Greek.	*Lat.*	*Ger.*	*Skr.*
Cloud (Fog), *νέφος*,	Nebula,	Nebel,	Nabhas (heaven).
Sky (Ether), *Ζεύς, Διός*,	Dyu-pater,	Tius,	Dyaus.

Compare deus, *Skr.* devas, *Gr.* *θεός*. From the same root (*div* "to shine") come also the names Diana, Juno, Janus, *Διώνη*.

Sky (Firmament), *Οὐρανος*	„	„	Varunas.

"Varunas" means *cingens*, "he who surrounds," from the root *var*, "to surround." Varunas is the god of the sea; the ancient Indians knew no sea, their sea is the Ether.

Fire	„	Vulcanus,	Volcan (Ang.-S.), Ulkâ.

Vulcanus means, "he who burns, shines." Ulkâ is "meteor, fire." That the Anglo-Saxon "volcan" means the "clear resplendent ether," can be proved both from Beowulf and Heliand. The German Wolke, "cloud," is derived from this word, as well as the English welkin. On the whole, the Latin names of divinities are clearer than those of the Greeks.

We cannot, of course, expect to meet with as clear testimony for the primitive community of origin in the myths as we do in language. For in the former we often find great analogy in single traits among tribes of the remotest parts of the globe which have no immediate connexion with the historical families of mankind. This phenomenon is a very natural one; for the religious element of the human mind is the same in all in regard to its basis. Again, the dispersed tribes formed many of their myths anew, when they settled down in their later dwelling-places. Thus in the cosmogonic myths of the Icelanders, as presented to us in the Edda, it is impossible not to perceive the influence of the peculiar locality of the northern Scandinavians.

In like manner, Germanic comparative philology, based upon the analysis of the Gothic, reveals to us the most positive important facts as to the primordial history of the German race, and is a living record of their consanguinity with the ancient inhabitants of Bactria,

Media, Persia, and Judea, and of the long and poetical communion of life with them in those favoured lands of Asia, the cradle of mankind.

The same comparative philology serves also to solve many of the most interesting problems of that indigenous poetry common to all Teutonic tribes, and now found embodied in the epos of the Nibelungen, in the Edda, and in the Danish and Swedish ballads. The poem of the Nibelungen, in its present form, is of about the year 1200. The account in the Edda was, perhaps, committed to writing in the tenth century, and the traditions preserved in it about Sigurd and Brynhild bear the old heathen impress, whereas the German epos supposes the Germanic heroes to be Christians. On the other hand, we have old German fragments of poetical composition belonging to that epos (the account of Hildebrand and Hadubrand, Theoderic's men), which evidently bear the stamp of high antiquity.* They cannot be much later than Charlemagne, who, as we know, took care to have the ancient national poems of the deeds of his ancestors recorded, that is to say, written down and collected.

But the philological analysis of the language, when applied to these documents, removes all uncertainty, and points out what is really historical in the old traditions of the nation.

The name of Sigurd has no meaning in Norse; it is only a corruption of Sigufriðus, "peace after victory." Nor has Gunnar, the Norse name of King Gunther, which is the modernised form of Gundahari "war-host," "army." The name of Sigfrid's murderer in the Edda is Gothormr (it ought to be at least Gopormr), which has no meaning in Norse, except Goth-worm, and is indeed nothing but a very corrupt mutilation of Godamar, "god-famed," the name of the third brother of the Jukings. These Jukings have among the Goths an incontestable historical foundation. The names of the four Jukings are mentioned as the glorious ancestors of the royal family and known historical personages in the *Lex Burgundionum* of the sixth century, in the following words: "Si quos apud regiæ memoriæ auctores, id est Gibicam, Godomarem, Gislahariun, Gundaharium, liberos fuisse constiterit," etc. The test of freedom was, that a family had been freemen under those kings. "Jor-

nandes (in the same century) De Rebus Geticis, c. 24., narrates that King Ermanrîch having put to death his consort Svanhild, her two brothers (the sons of Guðrun) revenged her.

Now, these documentary proofs of the origin of the epos among the Goths are fully confirmed by the very admissions of the Scandinavian account.

First, the localities are admitted to be German. In the Wieland-song (Völundr), King Niðaðr asks Wieland how he had come into possession of his treasures. Wieland answers, ironically, that he has not found them in the air; and adds:

"Gold was not on Grani's ways,
Far I thought our land from the Rhine-mountains."

The meaning of which is: "I had not Sigurd's horse, Grani (which carried the treasures he had received from the Dwarfs), nor was I near the Rhine where that treasure (der Nibelungen Hort) is submerged."

Gold is called, in the Edda, "the Rhine-metal;" and likewise (in the poems of the Skalds) "the apple of discord of the Nibelungen." (Edda, p. 118 b). "Sigurdr died south of the Rhine," says the same poem (p. 126 a). When Gunther foresees the treason at King Etzel's court, he says to his sister Guðrun:

"Too late it is, sister, to gather the Nibelungen,
Far it is to bring up for help their host,
From the Rhine-mountains the fearless heroes."

Sigmund, Sigfrid's father is called, "king of the land of the Franks," (p. 97 a). To this country, southward, Sigurdr rides, (p. 113 a). Now, these two last quotations are the work of the editor (diaskeuastes) of the Edda, who lived in the eleventh century; but in the old poem itself (p. 117 a) Sigfrid is called "Sigurðr inn Suðrœni," "Sigurdr of the South."

The poem also states that Svanhild, Guðrun's daughter, is married to "the King of the Goths, Jörmunrekkr," that is to say, to Ermanrîch, the historical Gothic king of the sixth century (p. 160 a. 163 a).

In short, the real Nibelungen Saga had not grown on Scandinavian soil. In the German poem, their treasure is the chief cause of the fight and extermination of the Burgundians; whereas the

Edda relates that Sigurdr acquires that treasure; after which it disappears, and has no further share in the development of the story.

The only conclusion to be drawn from this would seem to be, that the Northmen received the Nibelungen Saga in their warlike excursions about the middle of the ninth century, probably from Lothringen under Karlman and Arnulph. Dr. A.

Thus it can be proved by the science of language, not only that the epic poetry of the Teutonic nations sprang up in gentile Germany, but also that its deepest roots lie in the soil of Asia, with those of Germanic speech and primitive philosophy. The Scandinavians preserved the principal features of the Sagas as they had learned them as gentiles, whereas in the native country the poem was cast into its modern, Christian form. The "Twenty Songs of the Nibelungen," of about the year 1100, received their present extension almost a century before the birth of Dante. The poem of the Nibelungen is the Iliad of the Germanic tribes in the outward dress of the age of Christian chivalry. It embodies in immortal verse not only the catastrophe of the Burgundians and Theoderic the Great and other heroes of the fifth and sixth centuries, but also primitive traditions, the shadows of gods and heroes whose deeds were sung at the cradle, not only of Charlemagne, but also of Arminius and Thusnelda. This national tale was first sung by the Skalds to princes and warriors. When the romances of French chivalry had come into fashion, "the blind men," as one of those romances says, sang of Sigfrid to the common people, who cared nothing for the imported outlandish ("Welsh") fictions. The blind men in their turn also disappeared, and the Saga was circulated only in a despised popular book, "printed in this year," under the title of "The Horny (invulnerable) Sigfrid," as I have seen it in my childhood hawked about and read at the fairs of my native country, in the beginning of this century. "Der Nibelungen Not" was printed, but not read, in Frederick the Great's time. It was the rising national spirit which made Hagen's edition (1810) popular, and the work itself once more the great national poem, which is now generally read throughout Germany, in Simrock's modernized version or in the original. — B.

SECOND CHAPTER.

THE LAST RESULTS OF THE ITALIC RESEARCHES AS TO THE ORIGIN AND RELATIVE POSITIONS OF THE ANCIENT INHABITANTS OF ITALY.

(Reported by Dr. AUFRECHT, Oxford.)

NIEBUHR's historical criticism had put an end to a host of groundless and unscientific conjectures and dreams respecting the languages of primitive Italy, and cleared the ground for solid linguistic research. For, as linguistic research is blind without philology, so is philology without history. Niebuhr's general tendency in language was distinction; and what he found to be essentially heterogeneous was likely to appear to him autochthonic and original from the beginning. This was the case with the Etruscan. Disgusted with the unscrupulous and rambling method of Lanzi and his followers, who had ransacked the Greek Dictionary, and drawn largely upon their own imaginations and the credulity of their readers, in order to make the Etruscan language, what its alphabet evidently is, an archaic form of the Hellenic, Niebuhr maintained that the Etruscan was a purely barbarous language; that it is wholly distinct from the other more or less Latinizing tongues of Italy Proper, of the Apennines, and even of the Alps; that the ruling nations of Etruria came from the North; and that the roots of the language must be looked for in Rætia. This verdict of Niebuhr, so far from being shaken, is confirmed by all the serious and connected philological or historical researches which have been since instituted on the subject.*

* I have too much regard for the learned, ingenious, and critical author of Varronianus, to consider Donaldson's opinion, that the Etruscan is Scandinavian, anything but a joke which that acute English philologer has indulged in.

It was, of course, this language which attracted, from the first appearance of Niebuhr's "Roman History," the united efforts of philologers and linguists. Ottfred Müller, in his truly learned work "Die Etrusker" (1828), gave the first critical outlines of the grammar, as well as of the alphabet. A general scrutiny of all the Etruscan inscriptions was undertaken, under the auspices of the Archæological Institute of Rome, by O. Kellermann, whose most conscientious and critical labours were interrupted by his premature death in 1834. In the lectures delivered by me at the Archæological Institute at Rome, in the year 1832 (some notices of which will be found in the "Annali dell' Instituto" from 1832 to 1836), I advanced the theory I still maintain, that the Etruscan bears strong marks of being a mixed language, from the circumstance of such grammatical forms as have been ascertained being evidently analogous to what we know of Indo-Germanic flexions, whereas the greater part of the words which occur in the inscriptions prove most provokingly heterogeneous. On the other hand, the Tyrrhenic glosses in Hesychius (if they are of any value), and the inscription found about 1836 at Agylla, under the ruins of Etruscan Cære, and illustrated by Lepsius, contain words much more akin to the Greco-Latin stock. I do not think that the abundance of vowels can be accounted for by the assumption that this and some similar inscriptions represent a more ancient period. Until we possess bilinguar inscriptions of some extent we shall be unable to interpret them; but we cannot be mistaken as to their sounding less barbarous, or more like Greek or Latin, than the others. If, then, we have in the Etruscan a Greco-Latinizing grammar and a mixed vocabulary, and apply to this phenomenon the general theory of mixed languages, it does not follow that the

We do not know Etruscan, but we do know Icelandic. I must, however, confess that such jokes are an anachronism in our days. Dr. Freund's strictures upon him in a paper read before the Ethnological Society are seasonable; and prove that the few explanations he has attempted are inadmissible in themselves.

barbarous lexicographical elements are entirely un-Indo-Germanic; for Celtic, though decidedly barbarous, still forms a part of that family. But it does follow, from the analogy of all we know, that the groundwork of the language is indicated by the grammar, the indestructible badge of near kinship, and that in its origin the Etruscan was much more akin to Greek and Latin and the other Italic languages, than that element which forms in the monuments (that of Agylla and some smaller ones excepted) the predominant part of the vocabulary. A mixed language of this kind would be the natural consequence of a non-Italic tribe having taken possession of Tyrrhenia or the Mediterranean part of Central Italy, subdued the Italic indigenous population, and finally adopted their language, as the Norman conquerors did that of the Saxons, or the Arabs that of Persia. The coincidence of this result of an independent linguistic research with Niebuhr's demonstration of the northern (Rætian) origin of the Etruscans, attested by inscriptions found in an uninterrupted line, from that Alpine land and the Tyrol down to Tarquinii, appeared to me remarkable: the two researches seem mutually to confirm each other. The intrinsic nature of the language, as we find it in the monuments, leads also to the conclusion that the Greek words were a foreign element, received but not understood. Making every allowance for a different system of vocalization, such changes as

Pultuke from Polynikes, Akhmiem from Agamemnon,

are unmistakeably barbarous, and betray an absolute ignorance of the elements of which the Greek name is composed.

Thus "atrium" may have been inorganically formed from *αἴθριον*. But as to *haruspex*, which is also said to be an Etruscan word, we shall see below that it is thoroughly Latin, and has its Indo-Germanic root: it may for all that have been Etruscan, but it is not a corruption of *ἱεροσκόπος*. Both also may have been words of the conquered Helleno-Italic population of Etruria.

Indeed, *vorsus* "a square of one hundred feet," is quoted as being both Tuscan and Umbrian; and it is admitted that the Umbrians originally occupied Tyrrhenia.

During the last fifteen years, German students of comparative philology have made not only the Etruscan, but all the other Italic dialects of which we possess monuments, the subject of very scrupulous researches, especially Lepsius, Mommsen, and Aufrecht. I have, therefore, requested the last-named distinguished scholar, whose scientific report on the German inquiries my readers will have read with pleasure in the foregoing Chapter, to condense into a few pages the last results of those researches, in which he has taken so prominent a part by his Umbrian Monuments.* Dr. Aufrecht having kindly complied with my request, I have great pleasure in submitting to my readers his report upon this subject.

I.

The Etruscan.

THE convincing proofs of the Indo-European character of the Etruscan grammar are principally the following facts:

1. On the Cippus Penninus, we find the following forms of the word Velthina:

Velthina, Velthinas, Velthinam.

That *s* is the genitive termination, as in the other Indo-European languages, is undeniable.

2. We find *a*, *ia*, the termination of female names, exactly as in Greek and Latin.

3. *al* is the patronymic and metronymic termination; which evidently corresponds with the Latin *alis*, as in Australis, arvalis, triumphalis.

* Die umbrischen Sprachdenkmäler. Von Th. Aufrecht und A. Kirchhoff. Two volumes: Berlin, 1849–1851. The first (linguistic) part is the work of Dr. Aufrecht; the second (antiquarian) of Dr. Kirchhoff.

4. *Sa* added to a man's name indicates the name of his wife: thus, Larthial-i-sa means the consort of the son of Larthius. This form also bears the character of the Indo-Germanic languages, where that syllable has a genitive signification. In a similar way, the Greek genitive in *οιο*, originally *οσιο*, is not properly a case, but an adjective, *ἱππο-σ-ιο*=equestris. Indeed, açva-sya in Sanskrit means originally "belonging to the horse." The formative, *sya*, which is common in Sanskrit, is also found in the Icelandic *sja*, "this," as well as in Latin, Umbrian, and Oscan.*

The barbarous sound of the words in the Etruscan inscriptions certainly cannot be explained by the accumulation of consonants alone; for earlier inscriptions (that of Agylla and some shorter ones†) have many more vowels than the later. The only admissible explanation of this phenomenon is the assumption, that the Etruscan is a mixed language. We have abundant examples that the consequence of a mixture of two very different languages is that they both become decomposed and lose their former clearness lexically as well as etymologically. I assume it to be a historical fact, that the conquering Etruscans took Tyrrhenia from the Umbrians; and I deny the historical existence of Pelasgi in Italy, whether their language were akin to Greek or not.

I have, therefore, adopted another mode of getting nearer to the barbarous element in Etruscan. The Euganean inscriptions, which are found in the southern part of Rætia, as well as in Lombardy, particularly about Padua, and other ancient inscriptions which have come to light in that district, exhibit the same alphabet (except that the O occurs in them, which is unknown in Southern Etru-

* In the Edda it occurs in the nominative singular, masculine and feminine (p. 8 a and 61 b), and even in later works, for instance, "Kormak's Saga." To this form corresponds the Gothic *si*, English *she*. In Latin, Umbrian, and Oscan, it forms adjectives, as in boarium (forum), argentarius. Arius is = Asius, which ancient form is preserved in many proper names, as Cretasius, Domasius, Planasia, Taurasia, Vespasius. In the Lex agraria of Spurius Thorius (l. 12.) we find Viasieis instead of Viariis. In Oscan, flusasios is = florarius. In Umbrian, plenasios = plenarius. There exists no connection between this form and *aris*, *alis*; and what Freund says about these terminations in the Preface to his Dictionary is erroneous.

† Collected in Mommsen Unteritalische Dialekte, p. 174.

ria), and a language which in its character bears strong resemblance to the Etruscan. But I abstain from following up this conjecture until new monuments come to our aid.*

II.

The Latin and its kindred Italic Languages — the Umbrian, Sabellian, and Oscan.

Leaving out the Etruscans, and perhaps also the Messapii, in Calabria, of whose language we shall treat hereafter, we find in Italy Proper a chain of nations speaking Latinizing languages, and having a decided connection with each other: indeed, dialects of one and the same language.

According to the latest researches, we must comprise them under three heads:

Umbrian.		Sabellian.	Oscan.
Umbrian proper.	Latin.	Volscian, Marsian.	

* The language of Rætia (for this is the true orthography, not Rhætia) has, in consequence of Niebuhr's suggestions, been made the subject of the learned researches of Zeuss (1837), and of Steub (1843). Rætia, in its greatest extension, comprises the land of the Grisons, Tyrol, Voralsberg, and even the Bavarian Highland. But it seems more advisable to apply Niebuhr's assumption, as Zeuss does, in a much more limited sense, as referring to some peculiar small communities on the southern declivity of the Alps, where, in Roman times, we find the Euganeans, near the Lake of Garda; the Camuni, in Val Camonica; and the Lepontii, at the Adula Mountain or the Gotthard. It is only in these southern parts that we meet with Etruscan inscriptions. The result of the last researches instituted on the specific Romanic language now spoken there has been, that, besides the ordinary Romanic words and some roots bearing a Celtic character, there remains about one tenth which cannot be reduced to either. This circumstance induced Dr. Freund, the learned author of the "Latin-German Dictionary" (now engaged in compiling a Latin-English one on the same plan), to examine more minutely that mysterious caput mortuum. The Royal Academy of Science at Berlin furnished the means for undertaking this expedition, from which Dr. Freund has just returned. He has discovered a far greater number of the words of that primitive residue than he expected. As long as we have no bilinguar monument of any extent, there will still be a difficulty in identifying them; but the fact of their existence is of great importance. — BUNSEN.

Not only have they many roots in common, but they contain even a considerable quantity of identical words. Their inflexional forms present throughout the same formative principle. The differences consist partly in the system of sounds (Lautlehre), partly in the circumstance, that what appears the exception in the one, is often the rule in the other, both as to the inflexional forms and single words. Of course, there remains a residue of words which we cannot explain from the Italic. We must not, however, forget that, the Latin excepted, we have but scanty monumental remains of any of these languages; and that as to the Latin itself, the literature of which is before us, it may be asserted, without a paradox, that we probably possess little more than the half of its words. Of the anti-Ennian time, for instance, we have the fragments of the Carmen Saliare, which Cicero understood no better than a merely Latin scholar of our own days. They exhibit such dissimilarity from what we know as Latin, that we are constantly reminded of the defectiveness of our knowledge. Besides, how few words of common life, how few technical expressions are preserved to us in books!

We now proceed to examine these languages separately.

1. *The Umbrian.*

The Umbrians once occupied a great part of Etruria. Many Etruscan towns bore Umbrian names. The monuments of this language are all found in Umbria Proper; that is to say, in the Umbria of the Romans (Romagna). The most important among them are the seven Eugubine bronze tablets found in Iguvium (Gubbio). Of these, five have a national alphabet, with the writing from right to left; two use the Latin alphabet, with the writing from left to right. The former are by far the more ancient; they belong to the fourth century of Rome (about 400 B.C.), whereas those in Latin may be two centuries later. The language is the same in both; but the stage of development is different. In the old language, T K U stand also for D C O, which the modern language distinguishes from them as the Latin does.

S dwindles more and more into R.
Z becomes S.
A is often weakened into O.

We are justified, therefore, in making a distinction between Old and New Umbrian.

If the ancient Latin has assisted us in deciphering Umbrian words, we are now also enabled to explain Latin forms from the Umbrian. We shall illustrate this by some examples.

In Umbrian, the D between two vowels passes into a specific R, expressed in the national alphabet by a peculiar letter, in Latin by RS. The discovery of this law has led to the decipherment of many unintelligible words, as may be seen in the following fragments of a prayer to Fisovis Sancius for the bipedes and quadrupedes (men and cattle) of the town and country of Iguvium:

FISOVIE	SANCIE	DITU	OCRE
Fisovi	Sancie	dato	colli
FISI	TOTE	IOVINE	OCRER
Fisio	(et) civitati	Iguvinæ	collis
FISIE	TOTAR	IOVINAR	DUPURSUS
Fisii (et)	civitatis	Iguvinae	bipedibus
PETURPURSUS		FATO	FITO.
quadrupedibus		fatum	bonum.

The Umbrian and Latin have many peculiarities in common. They both are averse to diphthongs. In both

AI becomes Ê. AU becomes Ô. OI becomes Ô or Î.

The Latin has frequently changed D into L or R:

dingua = lingua. odor = olere. ad = ar.

In a similar manner, the Umbrian regularly changes D, between two vowels, into its peculiar lingual R:

Tripodare,	Ahtrepu*r*aum.
Bipedibus,	Dupu*r*sus.
Quadrupedibus,	Peturpu*r*sus.
Callidus (a horse with a white forehead),	Cale*r*us.
Calato (from calare),	Ca*r*itu.
Capidibus (from capis),	Capi*r*us.
Sedes,	Se*r*es.

Both languages frequently change S between two vowels into R. But the R in Umbrian goes even further than the Latin at the end of words.

Both languages exhibit a tendency to throw off the final M S D.

Many proofs might be adduced in support of the assertion that the Umbrian represents a more ancient form of Italic speech than the Latin. One of these is the fact of the Latin words which we recognize in the Umbrian inscriptions being precisely those which we find only in the oldest Latin. Another is, the circumstance of the aspirate F being regularly preserved in the middle of the word (Inlaut), where the Latin usually has only B.

In like manner, the Umbrian has retained the original S in the declension:

Gen. Sing.	Latin	AE,		Umbrian	AS.
	„	I,		„	ES.
Nom. Pl.	„	I,		„	OS.

It has also a Locativus both in the singular and plural, of which the Latin has only retained a few traces.

The Umbrian consistently distinguishes the consonantic declension from the declension of stems terminating in I. The masculines and feminines of the third declension, which terminate in a consonant, are declined as follows:

Acc. Sing.	O.	*Dat.*	} *Plural.*	US.
Nom. Plural.	OS.	*Ablat.*		

We may compare Kvestur (quæstor) and Ocris (collis, mons):

Sing. Nom.	*Acc.*	*Pl. Nom.*	*Lat. Abl.*
Kvestur,	Kvesturo,	Kvesturor,	Questurus.
Ocris,	Ocrem,	Ocres,	Ocris.

K before I and E passes in Umbrian into a sibilant (Ç), the most ancient instance of the phenomenon so prevalent in the Romanic languages, when compared with the Latin (carus, cher—Kikero, Cicerone).

The Umbrian monuments have been collected, critically examined, and explained in "Die umbrischen Sprachdenkmäler," alluded to above.

2. *The Sabellian, or the Volscian and Marsian Languages.*

For the decipherment of the Volscian language we have only two inscriptions of small extent — the Tabula Veliterna (found near Velletri), and the Tabula Antina (discovered in Civita d'Antino).

They are, however, sufficient to authorize us in saying, that this branch bears a closer resemblance to the Umbrian-Latin than the Oscan.

The Diphthongs are contracted

AI into E. OIS into IS.

The D of the imperative has been dropped in the Sabellian, as in the Umbrian and Latin —

ESTU for ESTUD.

As to the Marsian, our materials are still more scanty. The principal inscription, the Bronze of Rapino, is now in the Berlin Museum.

All we can say about it is, that it stands between the Latin and Oscan; but its inflexional system approaches nearer to the Latin.

3. *The Oscan.*

The Oscan language extends over Samnium, Campania, Lucania, Bruttium, and even as far as Messina. The central point of the Osci is the land of the Sabines, the name of which (Samnium) is merely a contraction of Sab-i-nium (in Oscan, Safinium).

The existence of a considerable number of inscriptions enables us to reconstruct the Oscan language much more satisfactorily than those which we have hitherto discussed. Its system of sounds is very transparent.

AI and OI having been preserved in the Oscan, the declension of the dative case is entirely Greek:

Greek	φ,	αις,	ῳ,	οις.
Oscan	AI,	AIS,	OI,	OIS.

The vowels have also been well preserved, and not arbitrarily changed, as in Umbrian and Latin. The final consonants in the flexions have remained. The vocalism and consonantism stand in good organic relation to each other. In the declension we have a

proper Locative: the ablative singular has maintained its final D; the accusative plural SS is nearer to the primitive NS than the Latin S.

Yet we know the Oscan only in its period of decay. This is proved by the frequent assimilations, and by the exaggerated aversion to a combination of certain consonants. The systematic arrangement of the language shows that the Oscans had a literature.

The Oscan is of the greatest importance for acquiring a real knowledge of the Latin language.

The recently discovered Oscan inscriptions have been explained by Dr. Aufrecht in the Journal for comparative philology, published at Berlin — "Zeitschrift für vergleichende Sprachforschung. Von Aufrecht und Kuhn."

APPENDIX.

The Messapian Dialect.

In that part of Southern Italy which the Greeks called Messapia (our Calabria), we find sepulchral inscriptions, exhibiting a language rich in vowels, with Indo-Germanic forms. Unfortunately, we have as yet no accurate copies of these inscriptions. The following phenomena are certain:

Nom. terminates in AS, OS
Gen. „ AIHI, IHI = aisi, isi = ο(σ)ιο.

For the S between two vowels passes into H, just as the spiritus asper in Greek has sprung from S.

We possess a few Messapian glosses, most of which admit of an Indo-Germanic solution.*

* *πανός* panis. Derived either from *pak*, coquere, baked; or, in my opinion, from *pâ*, to nourish.

βρένδος or *βρέντιον* stag, or stag's-head. In Lithuanian *brêdis* is the name for the elk, and in some districts for the stag.

σίπτα σιώπα Hesych.

βαυρία (dwelling-place, house). Derived probably from the root *φυ*, fu, and very like our *bower*.

βίσθη, a sort of knife for cutting grapes.

Menzana, a surname of Jupiter.

All the dialects of Southern Italy have been collected and examined in the work alluded to above: "Die unteritalischen Dialekte. Von Theodor Mommsen. Leipzig, 1851."

III.

Some Philological Points of Latin explained by comparison with the other Italic Dialects.

1. *The change of D in the beginning of certain Latin words into B.*

Phenomena like

Bonus,	originally	Duonus,
Bellum,	„	Duellum,
Bellona,	„	Duellona,
Bidens,	„	Duidens,

are certainly startling; but the analogy exhibited by the examples adduced is sufficient to prove that this change is an organic one.

The following explanation appears to be the most satisfactory:— We observe, first, that *duellum* is bisyllabic = *dvellum.* Owing to the Mute D exercising a hardening organic influence upon the V, this becomes *dbellum,* as a transitional form; and the D becoming too heavy, they pronounced and then wrote the word, *bellum.* The Greeks acted differently, and preferred throwing off the Digamma. Thus the Sanskrit *dvis* becomes δις, in Latin *bis.* But even in Greek the D in εἴκοσι (= twice 10) is dropped: the older form Ϝίκατι still exists in the Tab. Heracl. and elsewhere. The Sanskrit has *vinçati,* while all the Teutonic dialects have preserved the D as T, even our twenty.

The mollification of Gutturals, the hardest class of consonants, is a perfectly analogous case; thus

K(kh) becomes kv, G(gh) becomes gv.

The old inscriptions have pequnia, qura, oquoltus for pecunia, cura, occultus: cum, even as a preposition, is written quom. Quiesco is = κεῖμαι: quatio becomes in composition cutio. In Modern Umbrian dequrio = decuria, pequ = pecus, peiqu = pico, but peico = picom.

In the same manner we find tinguo formed from tingo, urgueo

from urgeo; anguis is = Gr. ἔχις, unguis = ὄνυξ: ungueo in Sanskrit is pronounced ang, the same root which is found in Anke (Swiss German = butter).

On the other hand, the mute exercising its hardening influence, we advance

from kp to p, from gb to b.

By this organic process we can explain some very startling transitional forms.

The original form of the interrogative pronoun is *KA*. Its different changes are:

Latin.	*Umbrian, Oscan.*	*Greek.*	*Ionic.*	*Germanic.*
QU,	P,	Π,	K,	HV.
quid,	pid,	πῶς,	κῶς,	hvas.

Another instance occurs in the phenomenon of our often finding a B in Greek and Latin, where the cognate languages have a G.

Βοῦς, bos = *Skr.* gaus, *Germ.* kû. Βαίνειν = *Skr.* gam, *Goth.* quiman = *Osc.* and *Umbr.* benum, *Lat.* venire. Βίος, vivus = *Skr.* gîva, *Goth.* quius.

By the same organic process, such strange phenomena as the Bœotian βανά = γυνή, can be explained.

Both these forms have sprung from

γ*f*ανα = *Skr.* ganâ, *Goth.* quinô.

2. *The Phenomenon of the want of Diphthongs.*

The old Latin often has diphthongs which afterwards disappear. In ancient inscriptions we find

Coirare	=	Curare.
Commoinis	=	Communis.
Loeber	=	Liber.
Loidus	=	Ludus.
Moerus	=	Murus.
Oinus	=	Unus.
Oinvorsus	=	Universus.
Oiti	=	Uti.
Ploirume	=	Plurimi.
Poiniceus	=	Punicius.

Remains of transition are visible in pœna, punire; mœnia, munire. A long ī stands for the old oi, in vinum, vicus = οἶνος, οἶκος. There is a constant oscillation between au and ô:

Aula and Olla. Plaustrum and Plostrum. Lautus and Lotus.

Instances of such contractions are particularly frequent in the flexions IS (dat. abl. pl. of 1st and 2nd decl. = ais, ois, o dat. sing. of 2nd decl.) = φ, Osc. oi:

Lat.	*Umbr.*	*Oscan.*	*Greek.*
Viis,	Vies,	Viais,	μούσαις.
Tauro,	Tore,	Tauroi,	ταύρῳ.
Tauris,	Toris,	Taurois,	ταύροις.
And in the conjugation:			
Stes,	....	Stais,	ἱσταίης.

3. *The dropping of final Consonants.*

Here also the different Italic dialects illustrate each other.

a. The terminal M was in old Latin arbitrarily retained and dropped. The beginning of the sepulchral inscription of Lucius Scipio in the Vatican furnishes an instance.

HONC.	OINO.	PLOIRUME.	COSENTIONT.	ROMANEI
hunc	unum	plurimi	consentiunt	Romani

DUONORO.	OPTIMO.	FUISE.	VIRO.
bonorum	optimum	fuisse	virum (for virorum).

It had probably a nasal sound, like the French n.

b. The same liberty was taken with the terminal S, as will appear by reference to the classic writers.

Cicero in the Orator says: "Ita enim loquebamur: *Qui est omnibu' princeps*, non *omnibus* princeps: et, Vita illa *dignu'* locoque, non *dignus*." Again Lucretius: 1, 186.

"Nam fierent juvenes subito ex infantibu parvis."

The same occurs very frequently in older poets.

c. The abl. sing. originally terminated invariably in D. Thus we read in the senatusconsultum de Bacchanalibus (of the year of Rome 568):

Sententiad,	=	Sententiâ.
in oquoltod,	=	in occulto
in conventionid,	=	in conventione.

The new critical school has banished the dream of "D paragogicum." We find this ablative D in Oscan throughout; the Old Umbrian, which indeed goes much further than the Latin in dropping the terminal consonants, has lost it altogether.

4. *The Changes of S between two Vowels.*

S between two vowels is apt in Latin and Umbrian to pass into R, whereas the Oscan preserves it or changes it into Z. Thus the Oscan is placed in the same antagonism to Latin and Umbrian as the Gothic is to all other German dialects. The Greek in such a position drops the S; or to speak more accurately, first changes it into the spiritus asper, and hence it is lost sight of. So the younger Dorian has Μῶά = μοῦσα, ποιῆάι = ποιῆσαι.

A knowledge of this process forms the basis of many well founded comparisons; for instance, in the formation of the gen. pl.:

	Osc.	*Lat.*	*Umbr.*	*Goth.*	*Angl.-S.*	*Greek.*
(Subst.)	Viazum,	Viarum,	Viarum,	-	-	μουσάων.
(Pron.)	Pazum,	Quarum,	Parum,	Thizô,	Thara,	τάων.
(Compar.)	Meliores	„	Batizans,	Pezzirun (Old G.),		βελτίονες = βελτίονσες = *Skr.* varîyânsas.
	(Old, Melioses).					

Thus we can combine:

Æolic, αὔως. *Lat.* Aurora. *Skr.* Ushâs.
Greek, νυός. „ Nurus. „ Snushâ. (*Germ.* Schnur.)

There are instances of this change in Latin: Arbor. Honor.
instead of the Old, Arbos. Honos.

In the New Umbrian, we find it even in declension:
Gen. sing. Totar Ijovinar (Civitatis Iguvinae).
Abl. pl. vescler adrer (vasculis atris).

In this it resembles on the one hand the *Old Norse*, (fiskr, *Goth.* fisks), on the other the *Laconic*, which uses, σιός for θεός, νέκυρ for νέκυς.

IV.

General Results as to the Origin of the Latin Language, and its Relation to the cognate Italic Tongues.

Niebuhr supposed the Latin to have been a mixed language, possessing a Greek element imported by the Pelasgi, and another originally Italic tribe. He supported this assertion by a very acute and essentially true observation. He remarked that, whereas the words belonging to the sphere of peaceable rural life agree in Greek and Latin, the Latin expressions for everything belonging to warfare, arms, and hunting have no words corresponding to them in Greek.

The observation is correct, however it may have been impugned by some linguistic etymologists. But if we consider this fact in the light of comparative philology, we find it to be of general occurrence in the Indo-Germanic languages. Our comparative tables in the last Chapter show this. It must, therefore, be explained in a manner applicable to all, that is to say, as we have done in the Report about the Germanic researches, by the circumstance that all those nations once lived as peaceable herdsmen, and, in part at least, as agriculturists, in their primitive Asiatic abodes. It is natural, that the names of the most important domestic animals, and only a few of the wild beasts, as wolf and bear, and the words for primitive wants (breadstuffs, metals, names of consanguinity and affinity in their farthest extensions) should be identical, not only in Greek and Latin, but also in the Germanic, Lithuanian and Slavonic languages. We subjoin some additional illustrations, as to the words for family relations.

Mother: Osc. amma; Old High Germ. amma; — compare Ger. amme (nurse); Icelandic amma (grandmother); Sanskrit amâ. The Italic expression for *man*, in opposition to woman, is: Lat. vir; Umbr. veir; Teut. ver; in Skr. vîras. Another name for man in general is ἀνήρ, Umbr. Osc. ner, Skr. nar. (The Ionic declension of ἀνήρ is ἀνέρος, ἀνέρι. The α is only prosthetic, as it often happens that a vowel is put before words beginning with a nasal or liquid or double consonant, e. g. ὄνομα nomen, ὀφρύς=eyebrow, &c.).

These words, therefore, are the Asiatic heirloom of the civilized nations of Europe. This adherence to old forms, indeed, need not surprise us. It is much more astonishing, and equally certain, although but very lately remarked, that the only two Indo-Germanic languages which have a free accent — that is to say, an accent independent of quantity — have, in all identical words, preserved that accentuation in the midst of so many changes; which, being a general rule, cannot be accidental.

Thus for instance:

Sanskrit.	*Greek.*
Svâdú,	ἡδύς.
Mádhu,	μέθυ.
Áçvas,	ἵππος.
Pátis,	πόσις.
Svápnas,	ὕπνος.
Páncan,	πέντε.
Saptán,	ἑπτά.

If, therefore, we find in the different branches of that stock different words for the implements of hunting and warfare, we must conclude that they were fixed after the separation took place.

But on inquiring more closely, we shall find, moreover, that the diverging words, which were quoted by Niebuhr in proof of a mixture, are generally reducible to roots common to all the branches. We exhibit the etymology of the very words chosen by him as instances:

Scutum is the Greek σκῦτος, from the root sku, "to cover;" from which also come the German schuh (shoe), scheune, &c.

Parma, πάρμη.

Jaculum, from jacere, Gr. ἰάπτω.

Arma, for arcma from arcere, "that which defends, wards off, the defence," Gr. ἀρκεῖν, ἀλαλκεῖν.

Pilum, the pestle, whence spear, from pinsere (conf. pistillum) Gr. πτίσσω (πτ for π just as in the Homeric πτόλις, πτόλεμος, for πόλις, πόλεμος).

Lancea, λόγχη.

Têlum, têla (what is woven) comes from texere, and stands for

texilla; thus pâlus (pfahl) stands for paxillus, mala (cheek) for maxilla, ala for axilla.

In the same manner *telum* is texillum from the root taksh, which was not originally, like texere, limited to weaving, but applied to all sorts of artificial work. Tvashtar, in the Vedas the name of the Indian Vulcan, comes from the same root. Hence taxan, the Gr. τέκτων, "carpenter;" the same roots appear in τόξος = wood shaped with a knife or similar instrument.

Clypeus, "shield," is intimately connected with the Gr. καλύπτω: then with celare, old High Germ. haljan, Ger. hehlen, compare κάλυξ, and old H. Ger. helawa, which both signify "the pod." The general sense, therefore, of the root is "that which conceals," from which also comes the German helm, helmet; ensis, Skr. asis, perhaps = ἄορ, ἆορ.

As to *duellum*, its original meaning seems to be hatred, enmity; from the Skr. dvish (odisse), Gr. ὀδύσσομαι.

These examples are sufficient to show, that the metal out of which these words were coined was taken from the same treasury, but coined independently. None of the known languages of this stock is the primitive one, neither the Greek, Latin, or Sanskrit. We must reconstruct the primordial tongue by a critical analysis and comparison of all the branches.

We may, however, bear in mind generally, as already observed, that the Greek and Latin have a closer affinity to each other, than to any other cognate family; as have the German and the Slavonic. The natural explanation seems to be that the Greeks and Romans lived longer together, and took in common, about the same period, a more southern direction; whereas the Germans and Slavonics took or kept in common a more northerly one.

V.

The Etymology of Annus, Cena, Magister, Minister, and some other old Italic words.

The Umbrian word for *Annus* is *aknos*. It seems impossible to combine these two forms. But we know that the older form for annus was *amnus*, as it is still preserved in *sollemnis*. This leads us

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to remark, that in many Latin words *mn* arose out of an assimilation of pn or bn. Thus *somnus* stands for sopnus (ὕπνος sopio), scamnum for scabnum (of scabellum), Samnium for Sabnium (Osc. Safinium), and Sanskrit etymology proves that *amnis* stands for apnis (Skr. *ap*, water), damnum for dabnum (Skr. *dabh*, to hurt). We may therefore suppose that *amnus* had an older form *apnus*, identical with the Umbrian *aknus*, with this difference, that the Umbrian retains the older guttural, which in Latin is changed into a labial—a change already explained. This correspondence becomes evident from the coincidence of the Latin *perennis* and Umbrian *peraknis*.

Ought we to write *Cœna*, *cæna* or *cena?* Though there is authority for each of these modes of writing, only one of them can be correct. Those who write cœna or cæna rely on the etymology of the word. They say it is derived from the Greek κοινός, and means a common meal. Some philologers, even at the present day, consider it to be the Greek δοίνη. Others derive it from co-edere, "to dine together."

Now, all the inscriptions before the time of Augustus have *cena*, and this is the orthography of the old MSS., for example, of Plautus. Still some doubt might be entertained, in the absence of more direct proof; such, however, exists. Festus informs us that "*Scensas* Sabini cœnas dicebant." This gloss, however, seems to be a corruption of the genuine form which exists in Umbrian. Here the word is pronounced *cersna* or *cesna*, and the Latin *cenatus* is rendered by *cersnatos*. Though there be no plausible derivation of this form, still we may learn from it, first, that the orthography with *e* is the true one; and secondly, that all the above-mentioned etymologies are devoid of all probability.

Again, Suetonius informs us, that *Nero*, in the language of the Sabines, meant "fortis ac strenuus," and Gellius states that Neriene or Nerio, the god of war, is of Sabine origin, "eoque significatur virtus et fortitudo." In Umbrian we have *ner*, signifying *a man*, κατ' ἐξοχήν, a chief.

In a similar way the true etymology of *Magister* and *Minister* is to be found in the comparison of the Oscan, minster, "smaller" = minus, and the Umbrian, mester, "greater"=magis. Minister stands,

therefore, for minus-ter. Freund's and Ritschl's derivation of it from *manus*, cannot therefore be maintained.*

Many later words, which we know only from the old Lexicographers, are common in Umbrian, e. g. *ocris* mons, *capis* "a vessel for sacrificial purposes." Festus has the old word *pesestas* in the sense of "pestilentia;" in Umbrian we have the verb *pesere* in the sense of perdere. It seems strange that the Latin has no word corresponding to the Gr. πῦρ, and. fiur, Anglo-S. fyr (fire). In Umbrian we only find *pir*, not ignis.

VI.

The Etymology of Italia and Titienses, and of some words connected with Religion.

As to *Italia*, we believe its older form to have been Vitalia; indeed the Oscan coins of the time of the Social War bear the legend *Vitelio*. Its derivation from *vitulus* appears perfectly correct; it is the Greek ἰταλός: a very appropriate name for a country possessing so much good pasture and such abundance of fine cattle.

As to the names of the three tribes of the Romulian city, *Luceres*, *Ramnenses*, and *Titienses*, the last only has a certain etymology in the name of the Sabine king, Titus Tatius. This Tatius is the diminutive of *tata*† (father), therefore absolutely the same name as Attila (dear father). With this word for "father" corresponds Acca for "mother." Acca Larentia means mother Larentia; and in Sanskrit there is identically the same name "Akkâ," for mother.

Religio is derived probably from relegere, not from religare. At least this was the opinion of Cicero, who says, Nat. Deor. 2, 28.:—"Qui omnia, quæ ad cultum deorum pertinerent, diligentes retractarent et tamquam relegerent, sunt dicti religiosi ex relegendo, ut elegantes ex elegendo, tamquam a diligendo diligentes, ex intelligendo in-

* This had been observed by Pott long before Mr. Donaldson expressed a similar opinion.

† The word Tata is still used for father in the popular Roman tongue; as the name of that good and pious layman Tata Giovanni shows, which (as every Roman knows) means Father Giovanni. (BUNSEN.)

telligentes; his enim in verbis omnibus inest vis legendi eadem, quæ in religioso." Legere had probably a wider sense formerly, as appears from the Greek λέγειν and even the Latin lex, legis. Religere was perhaps the same as secum reputare, and then restricted to the sense of revolving religious opinions. Religio, moreover, has never the same extended meaning in Latin which we give to our word religion; it signifies rather "consideration" in a moral point of view.

Superstitio comes from superstare, "to stand over a thing," to be puzzled by some occurrence, without any apparent reason; hence the signification of finding divine influence in accidents, which can be traced to a natural source.

Indigitamenta are prayers offered to the Indigetes, the deified heroes. *Indiges* comes from *inde*, the older form of *in*, and *ges* from gigno.

As to *Haruspex* it has been already observed that this is one of the Latin words said to be of Etruscan origin. It seems strange that no etymology of it has been handed down from antiquity by the earlier grammarians, such as Terentius Varro or Verrius Flaccus. Supposing the word to have been borrowed from the Etruscans, together with the institution of the haruspices, we should have expected that authors, who obviously had an opportunity of mentioning it, would have availed themselves of it; for instance, Cicero in his book "De Divinatione." As it is, however, Servius and Donatus are the first who attempt to explain the word, and even their views are evidently discordant, because they had no tradition about it. Servius (apud Apulejum Min. de nota aspir.) refutes the etymology proposed by some who would derive *aruspex* from *ara* and *specere* (βωμοσκόπος), by the simple fact that the *a* in *ara* is long, whereas it is short in *haruspex*. He might have added that the older form of *ara* being *asa*, it would be necessary to prove the same change in *haru-spex*. Servius himself considers it as a combination of *hara*, which he interprets as a sort of bird of augury, and *specere*. Now, with reference to this etymology, in the first place, there is no ancient author who mentions such a bird; but if they did, the question would then arise, what had the haruspices to do with the augures, the functions of the two being quite distinct? Donatus ad Terent. Phorm. iv. 4. 28., says: "Haruspex ab haruga nominatur. Nam haruga dicitur hostia

ab hara, in qua concluditur et servatur. Hara autem est, in qua pecora includuntur." There may be some truth in this remark, at all events in the first part of it, especially when we compare it with Paul. Diac. excerp.: "*Harviga* dicebatur hostia, cujus adhærentia inspiciebantur exta." It is, however, quite impossible to form *haruspex* directly from *harviga-spex* or *haruga-spex*. A third etymology, proposed by the learned Bishop Isidorus Hispalensis, from *hora* and *specere*, is scarcely deserving of notice. Most modern philologers adopt the etymology of Donatus. So does Otfr. Müller in his work on the Etruscans. He says (ii. 12.): "The word *haruspices*, in its more restricted meaning, signifies beholders of sacrifice, although, in a wider sense, it comprehends the interpreters of lightning and diviners of prodigies. It is probably derived from *aruga* or *arviga*, rather than from *ara* or *hara*." Others consider it as an Etruscan corruption of ἱεροσκόπος. But, in the first place, ἱεροσκόπος is a comparatively late and rare word in Greek, being first met with apparently in one of the Orphic poems, and then used chiefly as a translation of *haruspex*. In the second place, in an Etruscan bilinguar inscription found at Pisaurum, where a man is called "haruspex fulguriator," the Etruscan expression is widely different from *haruspex*.

Before I propose my own derivation of *haruspex*, it will be necessary to say a few words on the orthography. In several old MSS. it is written *haruspex* as well as *hariolus*, without the *h*; the MSS. of Plautus, Terence, and Sallust, for instance. On the other hand, in Virg. (Æn. ii. 739.), the Medicean MS. reads *harospex*. Among the inscriptions in which *haruspex* is found, I am not aware of any which goes as far back as the time of the Republic. It is spelt both *haruspex* and *aruspex*, but, in the greater number of inscriptions, with the *h*. These contain also some remarkable forms; namely: *harispex*, *arispex*, *arespex*, *arrespex*. The fluctuation between the forms with *h* and without it only proves that the pronunciation of the initial *h* began to be weakened at an early period, as is the case in some other words. In these instances, etymology alone can decide. The word *anser* is a remarkable example, which is so written by general consent; although the comparison of χήν, Sansk. *hansa*, Germ. *gans*, is sufficient to prove that its original form must have

been *hanser*. It would certainly be a great blunder to introduce *hanser* into a classical work, contrary to the authority of inscriptions, grammarians, and MSS.; but at the same time it must be confessed that orthography is dependent in a great degree upon time, place, and opinion, especially when a language is on the decline, as is evidently the case with the Latin. Nor is it a less blunder on the part of those philologers who pretend to fix the original form of Latin words by the authority of MSS. alone, not one of which goes back beyond the fourth century. They would by this means frequently run the risk of making the orthography of some particular grammarian or scribe that of antiquity in general. It sounds like a paradox, although it is not so in fact, that an inscription of early date is better authority for the orthography of a word than all the extant MSS. put together.

My own opinion is, that it should be written *haruspex*, and I shall try to prove so by the connexion in which it stands to some Latin words, and others in Greek and the cognate languages. First of all, we cannot separate *haruspex* from *hariolus* and *hariolari*. They are, indeed, very often connected by old authors.

Plaut. Mil. Gl. 3, 1, 99. (Ritschl):

> " Da quod dem quinquatribus
> Præcantrici, conjectrici, ariolæ atque aruspicæ."

Amphitr. 5. 2, 2. (Weise):

> " Nihil est quod timeas, hariolos, haruspices
> Mitte omnis : quæ futura et quæ facta, eloquor."

Terent. Phorm. 4, 4, 24. (Bentley):

> " Quot res post illa monstra evenerunt mihi?
> Introiit in ædis ater alienus canis:
> Anguis in impluvium decidit de tegulis:
> Gallina cecinit: interdixit hariolus,
> Aruspex vetuit."

Cicero de Nat. Deor. 1, 20.: Sequitur *μαντικὴ* vestra, quæ Latine divinatio dicitur, qua tanta imbueremur superstitione, si vos audire vellemus, ut haruspices, augures, harioli, vâtes et conjectores nobis essent colendi." *Hariolus* is a fortune-teller, and *hariolari* means to foretell future events. Compare Plaut. Rud. 4, 4, 95. (W.):

" *Gr.* Quid, si ista aut superstitiosa aut hariola est, atque omnia,
Quidquid insit, vera dicet? anne habebit hariola?
Dæ. Non feret, nisi vera dicet, nequidquam hariolabitur."

Asin. ii. 2. 49. (W.).

" Ergo mirabar, quod dudum scapulæ gestibant mihi,
Hariolari quæ occeperunt, sibi esse in mundo malum."

It is not distinctly stated what were the specific functions of the *harioli.* I should imagine from the similarity of the names, it was the same as haruspices. But the haruspices were public officers, and only consulted about events which concerned the republic: the *harioli,* on the contrary, were private persons who obtained their living by fortune-telling.* The peasant mentioned by Phædrus (3, 3. Bentley),

" Alenti cuidam pecora pepererunt oves
Agnos humano capite. Monstro exterritus,
Ad consulendos currit mœrens hariolos,"

could not go to the haruspices. The harioli soon fell into contempt, and *hariolari* signifies also "to prattle, to talk foolishly." This last derivation has given rise to the common etymology of hariolus from *fari,* which is improbable from the different quantity of the two words.

The principal business of the haruspices was to observe the entrails of a sacrificed animal, and to foretell the future according as the appearances were auspicious or inauspicious. Here they are sometimes called simply *extispices.* Compare Cic. de Div. 1, 6.: "Quæ est autem gens aut quæ civitas, quæ non aut extispicum, aut monstra aut fulgura interpretantum .... prædictione moveatur."

Ib. 1, 16.: "Qui, quum Achivi cœpissent

Inter se strepere aperteque artem obterere extispicum."

Ib. 1, 33.: "Quod Hetruscorum declarant et haruspicini et fulgurales, et tonitruales libri, vestri etiam augurales." Non. Marcell., p. 16.

It is true, that the haruspices had also to interpret lightnings, and we find a distinction between haruspices extispici and haruspices

* Cic. de Div. i. 458.: "eos; qui quæstus causa hariolentur."

fulguratores. The latter function was indeed secondary, inasmuch as it was exercised in the case of some great impending calamity; whereas no important public enterprise was undertaken without the extispicia. As the same person might be both extispex and fulgurator, it is not astonishing to find them both called haruspices. Haruspices is formed in the same manner as extispex, auspex, extispicus, vestispica (a servant, who had the care of the wardrobe "quod vestem spiciat"). *Haru*, a word of the fourth declension, must have had precisely the same meaning as *ext*[illegible], namely entrails. It would be extraordinary should we be misled by the agreement of the Greek, Teutonic, Lithuanian and Sanskrit languages in adopting this opinion. In Greek we find χολάς and χόλιξ, both meaning bowels. χόλικες ἐφθαί (Aristoph. Equit. 717.) seem to have been a favourite dish of the Athenians. R and L are so easily interchangeable, that no farther proof is necessary to show that haru, χολάς, χόλιξ contain the same root, though differing in their terminations. For the *h* and χ in Greek and Latin, we should expect a *g* in Teutonic. In fact, we find in Old Norse *garnir* f. pl. bowels; *garn-mör*, the fat which lies around the bowels. In the Edda 45. it is said that Loki is bound by the gods with the bowels of his son: "*görnum* ins hrimkalda magar." In Old High German we have the gloss *mitti-garni* arvina, that is, μεσεντέριον. In Lithuanian the same word is found as *zarna* f. a gut, pl. *zarnos*, bowels. In many instances a Lithuanian *z* corresponds to the Greek χ and Latin *h*: *zema*, hiems, χειμών; *wezu*, veho, ὀχέω; *zmonis*, homo; *zasis*, χήν. The Sanskrit word shows a slight variation in the vowel, owing to the influence of the following *r*, and is pronounced *hirâ* f. It occurs only in the Vedas, and is explained by the Scholiast to Yajurveda, xxv. 9., as a tubular vessel of the body conveying food.*

This will be sufficient, I hope, to show that *haruspex* is nothing more nor less than a priest, who had to observe and to interpret the entrails of a hostia; in one word, identical with extispex. The same is expressed by hariolus. We must suppose that from *haru* a verb *häruor* or *harior* (compare harispex of the inscriptions) was formed,

* The word being very rare, I give the other passages where it appears: Atharvaveda, i, 4, 1, 3. vii, 35, 1.

which meant to observe the bowels, just as from fulgur, we find fulgurator, an interpreter of lightning, derived. From this verb, again, *hariolus* was derived, which gave rise to *hariolari*.

I cannot conclude this discussion, without adding that the Sanskrit *hirâ* reminds us strongly of another Latin term for bowels; namely, *hiræ*. It is a rare word, found only once in Plautus, Curc. 2, 1, 23. (W.):

"Lien necat, renes dolent,
Pulmones distrahuntur, cruciatur jecur,
Radices cordis pereunt, hiræ omnes dolent."

It is mentioned again by Macrobius, Comm. in Somn. Scip. 1, 6. (Fan.): "Et intestina principalia tria, quorum unum disseptum vocatur, quod ventrem et cetera intestina secernit: alterum medium, quod Græci μεσεντέριον dicunt: tertium, quod veteres hiram vocarunt, habeturque præcipuum intestinorum omnium, et cibi retrimenta ducit." And again by Paulus Diac. Excerp.: "Hira quæ deminutive dicitur hilla, quam Græci dicunt νῆστιν, intestinum est, quod jejunum vocant." A derivative of *hira* is more common, *hilla*, standing for *hirula*. Compare Non. Marc. p. 122.

THIRD CHAPTER.

THE LAST RESULTS OF THE PERSIAN RESEARCHES IN COMPARATIVE PHILOLOGY.

(Reported by Dr. MAX MÜLLER.)

BY means of laws like that of the "correspondence of letters," discovered by Rask and Grimm, it has been possible to determine the exact form of words in Gothic, in cases where no trace of them occurred in the literary documents of the Gothic nation. Single words which were not to be found in Ulfilas have been recovered by applying certain laws to their corresponding forms in Latin or Old High German, and thus retranslating them into Gothic. But a much greater conquest was achieved in Persia. Here comparative philology has actually had to create and reanimate all the materials of language on which it was afterwards to work. Nothing was known of the language of Persia and Media previous to the Shahnaméh of Firdusi, composed about 1000 A.D., and it is due entirely to the inductive method of comparative philology that we have now before us contemporaneous documents of three periods of Persian language, deciphered, translated, and explained. We have the language of the Zoroastrians, the language of the Achaemenians, and the language of the Sassanians, which represent the history of the Persian tongue in three successive periods — all now rendered intelligible by the aid of comparative philology, while but fifty years ago their very name and existence were questioned.

The labours of Anquetil Duperron, who first translated the

Zendavesta, were those of a bold adventurer — not of a scholar. Rask was the first who, with the materials collected by Duperron and himself, analysed the language of the Avesta scientifically. He proved —

1. That Zend was not a corrupted Sanskrit, as supposed by W. Erskine, but that it differed from it as Greek, Latin, or Lithuanian differed from one another and from Sanskrit.

2. That the modern Persian was really derived from Zend as Italian was from Latin; and

3. That the Avesta, or the works of Zoroaster, must have been reduced to writing at least previous to Alexander's conquest. The opinion that Zend was an artificial language (an opinion held by men of great eminence in Oriental philology since the days of Sir W. Jones) is passed over by Rask as not deserving refutation.

The first edition of the Zend texts, the critical restitution of the MSS., the outlines of a Zend grammar, with the translation and philological anatomy of considerable portions of the Zoroastrian writings, were the work of the late Eugène Burnouf. He was the real founder of Zend philology. It is clear from his works, and from Bopp's valuable remarks in his Comparative Grammar, that Zend in its grammar and dictionary is nearer to Sanskrit than any other Indo-European language. Many Zend words can be re-translated into Sanskrit simply by changing the Zend letters into their corresponding forms in Sanskrit. With regard to the "correspondence of letters" in Grimm's sense of the word, Zend ranges with Sanskrit and the classical languages. It differs from Sanskrit principally in its sibilants, nasals, and aspirates. The Sanskrit *s*, for instance, is represented by the Zend *h*, a change analogous to that of an original *s* into the Greek aspirate, only that in Greek this change is not general. Thus the geographical name, "hapta hendu," which occurs in the Avesta, becomes intelligible, if we re-translate the Zend *h* into the Sanskrit *s*. For "sapta sindhu," or the "Seven Rivers," is

the old Vaidik name of India itself, derived from the five rivers of the Penjáb, together with the Indus, and the Sarasvati.

Where Sanskrit differs in words or grammatical peculiarities from the northern members of the Arian family, it frequently coincides with Zend. The numerals are the same in all these languages up to 100. The name for thousand, however, (sahasra), is peculiar to Sanskrit, and does not occur in any of the Indo-European dialects except in Zend, where it becomes 'hazanra.' In the same manner the German and Slavonic languages have a word for thousand peculiar to themselves; as also in Greek and Latin we find many common words which we look for in vain in any of the other Indo-European dialects. These facts are full of historical meaning; and with regard to Zend and Sanskrit, they prove that these two languages continued together long after they were separated from the common Indo-European stock.

Still more striking is the similarity between Persia and India in religion and mythology. Gods unknown to any Indo-European nation are worshipped under the same names in Sanskrit and Zend; and the change of some of the most sacred expressions in Sanskrit into names of evil spirits in Zend, only serves to strengthen the conviction that we have here the usual traces of a schism which separated a community that had once been united.

Burnouf, who compared the language and religion of the Avesta principally with the later classical Sanskrit, inclined at first to the opinion that this schism took place in Persia, and that the dissenting Brahmans immigrated afterwards into India. This is still the prevailing opinion, but it requires to be modified in accordance with new facts elicited from the Veda. Zend, if compared with classical Sanskrit, exhibits in many points of grammar, features of a more primitive character than Sanskrit. But it can now be shown, and Burnouf himself admitted it, that when this is the case, the Vaidik differs on the

very same points from the later Sanskrit, and has preserved the same primitive and irregular form as the Zend. I still hold that the very name of Zend was originally a corruption of the Sanskrit word "chandas" (i. e., metrical language, cf. *scandere*), which is the name given to the language of the Veda by Pâṇini and others. When we read in Pâṇini's grammar that certain forms occur in "chandas" but not in the classical language, we may almost always translate the word "chandas" by Zend, for nearly all these rules apply equally to the language of the Avesta.

In mythology also, the "nomina and numina" of the Avesta appear at first sight more primitive than in Manu or the Mahâbhârata. But if regarded from a Vaidik point of view, this relation shifts at once, and the gods of the Zoroastrians come out once more as mere reflections of the primitive and authentic gods of the Veda. It can now be proved, even by geographical evidence, that the Zoroastrians had been settled in India before they immigrated into Persia. I say the Zoroastrians, for we have no evidence to bear us out in making the same assertion of the nations of Persia and Media in general. That the Zoroastrians and their ancestors started from India during the Vaidik period can be proved as distinctly as that the inhabitants of Massilia started from Greece. The geographical traditions in the first Fargard of the Vendidad do not interfere with this opinion. If ancient and genuine, they would embody a remembrance preserved by the Zoroastrians, but forgotten by the Vaidik poets — a remembrance of times previous to their first common descent into the country of the Seven Rivers. If of later origin, and this is more likely, they may represent a geographical conception of the Zoroastrians after they had become acquainted with a larger sphere of countries and nations, subsequent to their emigration from India.

These and similar questions of the highest importance for the early history of the Arian language and mythology, however,

must await their final decision, until the whole of the Veda and the Avesta shall have been published. Of this Burnouf was fully aware, and this was the reason why he postponed the publication of his researches into the antiquities of the Iranian nation. The same conviction is shared by Westergaard and Spiegel, who are each engaged in an edition of the Avesta, and who, though they differ on many points, agree in considering the Veda as the safest key to an understanding of the Avesta. Professor Roth, of Tubingen, has well expressed the mutual relation of the Veda and Zendavesta under the following simile: "The Veda," he writes, "and the Zendavesta are two rivers flowing from one fountain-head: the stream of the Veda is the fuller and purer, and has remained truer to its original character; that of the Zendavesta has been in various ways polluted, has altered its course, and cannot, with certainty, be traced back to its source."

As to the language of the Achaemenians, presented to us in the Persian text of the cuneiform inscriptions, there was no room for doubt, as soon as it became legible at all, that it is the same tongue as that of the Avesta, only in a second stage of its continuous growth. The process of decyphering these bundles of arrows by means of Zend and Sanskrit has been very much like decyphering an Italian inscription without a knowledge of Italian, simply by means of classical and mediæval Latin. It would have been impossible, even with the quick perception and patient combination of a Grotefend, to read more than the proper names and a few titles on the walls of the Persian palaces, without the aid of Zend and Sanskrit; and it seems almost providential, as Lassen remarked, that these inscriptions, which at any previous period would have been, in the eyes of either classical or oriental scholars, nothing but a quaint conglomerate of nails, wedges, or arrows, should have been rescued from the dust of centuries at the very moment when the discovery and study of Sanskrit and Zend had enabled

the scholars of Europe to grapple successfully with their difficulties.

Upon a closer inspection of the language and grammar of these mountain records of the Achaemenian dynasty, a curious fact came to light which seemed to disturb the historical relation between the language of Zoroaster and the language of Darius. At first, historians were satisfied with knowing that the edicts of Darius could be explained by the language of the Avesta, and that the difference between the two, which could be proved to imply a considerable interval of time, was such as to exclude for ever the supposed historical identity of Darius Hystaspes and Gushtasp, the mythical pupil of Zoroaster. The language of the Avesta, though certainly not the language of Zarathustra*, displayed a grammar so much more luxuriant, and forms so much more primitive than the inscriptions, that centuries

* Spiegel states the results of his last researches into the language of the different parts of the Avesta in the following words:

"We are now prepared to attempt an arrangement of the different portions of the Zendavesta in the order of their antiquity. First, we place the second part of the Yasna, as separated in respect to the language of the Zendavesta, yet not composed by Zoroaster himself, since he is named in the third person; and indeed everything intimates that neither he nor his disciple Gushtasp was alive. The second place must unquestionably be assigned to the Vendidad. I do not believe that the book was originally composed as it now stands: it has suffered both earlier and later interpolations; still, its present form may be traced to a considerable antiquity. The antiquity of the work is proved by its contents, which distinctly show that the sacred literature was not yet completed.

"The case is different with the writings of the last period, among which I reckon the first part of the Yasna, and the whole of the Yeshts. Among these a theological character is unmistakeable, the separate divinities having their attributes and titles dogmatically fixed.

"Altogether, it is interesting to trace the progress of religion in Parsí writings. It is a significant fact, that in the oldest, that is to say, the second part of the Yasna, nothing is fixed in the doctrine regarding God. In the writings of the second period, that is in the Vendidad, we trace the advance to a theological, and, in its way, mild and scientific system. Out of this, in the last place, there springs the stern and intolerant religion of the Sassanian epoch." — *From the Rev. J. Murray Mitchell's Translation.*

must have elapsed between the two periods represented by these two strata of language. When, however, the forms of these languages were subjected to a more and more searching analysis, it became evident that the phonetic system of the cuneiform inscriptions was more primitive and regular than even that of the earlier portions of the Avesta. This difficulty, however, admits of a solution; and, like many difficulties of the kind, it tends to confirm, if rightly explained, the very facts and views which at first it seemed to overthrow. The confusion in the phonetic system of the Zend grammar is no doubt owing to the influence of oral tradition. Oral tradition, particularly if confided to the safeguard of a learned priesthood, is able to preserve, during centuries of growth and change, the sacred accents of a dead language; but it is liable at least to the slow and imperceptible influences of a corrupt pronunciation. There are no facts to prove that the text of the Avesta, in the shape in which the Parsees of Bombay and Yezd now possess it, was committed to writing previous to the Sassanian dynasty (226 A. D.). After that time it can indeed be traced and to a great extent be controlled and checked by the Huzvaresh translations made under that dynasty. Additions to it were made, as it seems, even after these Huzvaresh translations; but their number is small, and we have no reason to doubt that the text of the Avesta, in the days of Ardâ Viraf, was on the whole exactly the same as at present. At the time when these translations were made, it is clear from their own evidence that the language of Zarathustra had already suffered, and that the ideas of the Avesta were no longer fully understood even by the learned. Before that time we may infer, indeed, that the doctrine of Zoroaster had been committed to writing, for Alexander is said to have destroyed the books of the Zoroastrians. But whether on the revival of the Persian religion and literature, that is to say 500 years after Alexander, the works of Zoroaster were collected and restored from extant MSS., or from oral tradition, must remain

uncertain, and the disturbed state of the phonetic system would rather lead us to suppose a long-continued influence of oral tradition. What the Zend language might become, if entrusted to the guardianship of memory alone, unassisted by grammatical study and archæological research, may be seen at the present day, when some of the Parsees, who are unable either to read or write, still mutter hymns and prayers in their temples, which, though to them mere sound, disclose to the experienced ear of an European scholar the time-hallowed accents of Zarathustra's speech.

Thus far the history of the Persian language had been reconstructed by the genius and perseverance of Grotefend, Burnouf, Lassen, and last, not least, by the comprehensive labours of Rawlinson, from the ante-historical epoch of Zoroaster down to the age of Darius and Artaxerxes II. It might have been expected that, after that time, the contemporaneous historians of Greece would have supplied the sequel. Unfortunately the Greeks cared nothing for any language except their own; and little for any other history except as bearing on themselves. The history of the Persian language after the Macedonian conquest and during the Parthian occupation is indeed but a blank page. The next glimpse of an authentic contemporaneous document is the inscription of Ardeshir, the founder of the new national dynasty of the Sassanians. It is written in what was once called Pehlevi, and is now more commonly known as Huzvaresh, this being the proper title of the language of the translations of the Avesta. The legends of Sassanian coins, the bilinguar inscriptions of Sassanian emperors, and the translation of the Avesta by Sassanian reformers, represent the Persian language in its third phase. To judge from the specimens given by Anquetil Duperron, it was not to be wondered at that this dialect, then called Pehlevi, should have been pronounced an artificial jargon. Even when more genuine specimens of it became known, the

language seemed so overgrown with Semitic and barbarous words, that it was expelled from the Iranian family. Sir W. Jones pronounced it to be a dialect of Chaldaic. Spiegel, however, who is now publishing the text of these translations, has established the fact that the language is truly Arian, neither Semitic nor barbarous, but Persian in roots and grammar. He accounts for the large infusion of foreign terms by pointing to the mixed elements in the intellectual and religious life of Persia during and before that period. There was the Semitic influence of Babylonia, clearly discernible even in the characters of the Achaemenian inscriptions; there was the slow infiltration of Jewish ideas, customs, and expressions, working sometimes in the palaces of Persian kings, and always in the bazars of Persian cities, on high roads and in villages; there was the irresistible power of the Greek genius, which even under its rude Macedonian garb emboldened oriental thinkers to a flight into regions undreamed of in their philosophy; there were the academies, the libraries, the works of art of the Seleucidae; there was Edessa on the Euphrates, a city where Plato and Aristotle were studied, where Christian, Jewish, and Buddhist tenets were discussed, where Ephraem Syrus taught, and Syriac translations were circulated which have preserved to us the lost originals of Greek and Christian writers. The title of the Avesta under its Semitic form "Apestako," was known in Syria as well as in Persia, and the true name of its author, Zarathustra, is not yet changed in Syriac into the modern Zerdusht. While this intellectual stream, principally flowing through Semitic channels, was irrigating and inundating the west of Asia, the Persian language had been left without literary cultivation. Need we wonder, then, that the men, who at the rising of a new national dynasty (226) became the reformers, teachers, and prophets of Persia, should have formed their language and the whole train of their ideas on a Semitic model. Motley as their language may appear to a Persian scholar fresh from the Avesta

or from Firdusi, there is hardly a language of modern Europe which, if closely sifted, would not produce the same impression on a scholar accustomed only to the pure idiom of Homer, Cicero, Ulfilas, or Caedmon. Moreover, the *soul* of the Sassanian language—I mean its grammar—is Persian and nothing but Persian; and though meagre when compared with the grammar of the Avesta, it is richer in forms than the later Parsí, the Derí, or the language of Firdusi. The supposition (once maintained) that Pehlevi was the dialect of the western provinces of Persia is no longer necessary. As well might we imagine, (it is Spiegel's apposite remark), that a Turkish work, because it is full of Arabic words, could only have been written on the frontiers of Arabia. We may safely consider the Huzvaresh of the translations of the Avesta as the language of the Sassanian court and hierarchy. Works also like the Bundehesh and Minokhired belong by language and thought to the same period of mystic incubation, when India and Egypt, Babylonia and Greece, were sitting together and gossiping like crazy old women, chattering with toothless gums and silly brains about the dreams and joys of their youth, yet unable to recall one single thought or feeling with that vigour which once gave it life and truth. It was a period of religious and metaphysical delirium, when everything became everything, when Mâyâ and Sophia, Mitra and Christ, Virâf and Isaiah, Belus, Zarvan, and Kronos were mixed up in one jumbled system of inane speculation, from which at last the East was delivered by the positive doctrines of Mohammed, the West by the pure Christianity of the Teutonic nations.

In order to judge fairly of the merits of the Huzvaresh as a language, it must be remembered that we know it only from these speculative works, and from translations made by men whose very language had become technical and artificial in the schools. The idiom spoken by the nation was probably much less infected by this Semitic fashion. Even the translators sometimes give the Semitic terms only as a paraphrase or more

distinct expression side by side with the Persian. And, if Spiegel's opinion be right that Parsí, and not Huzvaresh, was the language of the later Sassanian empire, it furnishes a clear proof that Persian had recovered itself, had thrown off the Semitic ingredients, and again become a pure and national speech. This dialect (the Parsí) also exists only in translations; and we owe our knowledge of it to Spiegel, the author of the first Parsí grammar.

This third period in the history of the Persian language, comprehending the Huzvaresh and Parsí, ends with the downfall of the Sassanians. The Arab conquest quenched the last sparks of Persian nationality; and the fire-altars of the Zoroastrians were never to be lighted again, except in the oasis of Yezd and on the soil of that country which the Zoroastrians had quitted as the disinherited sons of Manu. Still the change did not take place at once. Mohl, in his magnificent edition of the Shahnameh, has treated this period admirably, and it is from him that I derive the following facts. For a time, Persian religion, customs, traditions, and songs survived in the hands of the Persian nobility and landed gentry (Dihkans) who lived among the people, particularly in the eastern provinces, remote from the capital and the seats of foreign dominion, Baghdad, Kufah, and Mosul. Where should Firdusi have collected the national strains of ancient epic poetry which he revived in the Shahnameh (1000 A.D.), if the Persian peasant and the Persian knight had not preserved the memory of their old heathen heroes, even under the vigilant oppression of Mohammedan zealots? True, the first collection of epic traditions was made under the Sassanians. But the work commenced under Nushirvan, and finished under Yezdegird, the last of the Sassanians, was destroyed by Omar's command. Firdusi himself tells us how this first collection was made by the Dihkan Danishver. "There was a Pehlevan," he says, "of the family of the Dihkans, brave and powerful, wise and illustrious, who

loved to study the ancient times, and to collect the stories of past ages. He summoned from all the provinces old men who possessed portions of (i. e. who knew) an ancient work in which many stories were written. He asked them about the origin of kings and illustrious heroes, and how they governed the world which they left to us in this wretched state. These old men recited before him, one after the other, the traditions of the kings and the changes in the empire. The Dihkan listened, and composed a book worthy of his fame. This is the monument he left to mankind, and great and small have celebrated his name." The collector of this first epic poem, under Yezdegird, is called a Dihkan by Firdusi. Dihkan, according to the Persian dictionaries, means (1.) farmer, (2.) historian; and the reason commonly assigned for this double meaning is, that the Persian farmers happened to be well read in history. Quatremère, however, has proved that the Dihkans were the landed nobility of Persia; that they kept up a certain independence, even under the sway of the Mohammedan Khalifs, and exercised in the country a sort of jurisdiction in spite of the commissioners sent from Baghdad, the seat of the government. Thus Danishver even is called a Dihkan, although he lived previous to the Arab conquest. With him, the title was only intended to show that it was in the country and among the peasants that he picked up the traditions and songs about Jemshid, Feridún, and Rustem. Of his work, however, we know nothing. It was destroyed by Omar; and, though it survived in an Arabic translation, even this was lost in later times. The work, therefore, had to be recommenced when in the eastern provinces of Persia a national, though no longer a Zoroastrian, feeling began to revive. The governors of these provinces became independent as soon as the power of the Khalifs, after its rapid rise, begun to show signs of weakness. Though the Mohammedan religion had taken root, even among the national party, yet Arabic was no longer countenanced by the governors of the eastern provinces.

Persian was spoken again at their courts, Persian poets were encouraged, and ancient national traditions, stripped of their religious garb, began to be collected anew. It is said that Jacob, the son of Leis (870), the first prince of Persian blood who declared himself independent of the Khalifs, procured fragments of Danishver's epic, and had it rearranged and continued. Then followed the dynasty of the Samanians, who claimed descent from the Sassanian kings. They, as well as the later dynasty of the Gaznevides, pursued the same popular policy. They were strong, because they rested on the support of a national Persian spirit. The national epic poet of the Samanians was Dakiki, by birth a Zoroastrian. Firdusi possessed fragments of his work, and has given a specimen of it in the story of Gushtasp. The final accomplishment, however, of an idea, first cherished by Nushirvan, was reserved for Mahmud the Great, the second king of the Gaznevide dynasty. By his command, collections of old books were made all over the empire. Men who knew ancient poems were summoned to the court. One of them was Ader Berzin, who had spent his whole life in collecting popular accounts of the ancient kings of Persia. Another was Serv Azad, from Merv, who claimed descent from Neriman, and knew all the tales concerning Sam, Zal, and Rustem, which had been preserved by his family. It was from these materials that Firdusi composed his great epic, the Shahnameh. He himself declares, in many passages of his poem, that he always followed tradition. "Traditions," he says, "have been given by me; nothing of what is worth knowing has been forgotten. All that I shall say, others have said before me: they plucked before me the fruits in the garden of knowledge." He speaks in detail of his predecessors: he even indicates the sources from which he derives different episodes, and it is his constant endeavour to convince his readers that what he relates are not poetical inventions of his own. Thus only can we account for the fact, first pointed out by Burnouf, that many of the heroes in the Shahnameh still ex-

hibit the traits, sadly distorted, it is true, but still unmistakeable, of Vaidik deities, which had passed through the Zoroastrian schism, the Achaemenian reign, the Macedonian occupation, the Parthian wars, the Sassanian revival, and the Mohammedan conquest, and of which the Dihkans could still sing and tell, when Firdusi's poem impressed the last stamp on the language of Zarathustra. Bopp had discovered already, in his edition of Nalas (1832), that the Zend "Vivanghvat" was the same as the Sanskrit "Vivasvat;" and Burnouf, in his "Observations sur la Grammaire Comparée de M. Bopp," had identified a second personage, the Zend "Keres'âs'pa" with the Sanskrit "Kris'âs'va." But the similarity between the Zend "Keres'âs'pa" and the "Garshasp" of the Shahnameh opened a new and wide prospect to Burnouf, and afterwards led him on to the most striking and valuable results. Some of these were published in his last work on Zend, "Études sur la Langue et les Textes Zends." This is a collection of articles published originally in the Journal Asiatique between 1840 and 1846; and it is particularly the fourth essay, "Le Dieu Homa," which opens an entirely new mine for researches into the ancient state of religion and tradition common to the Arians before their schism. Burnouf showed that three of the most famous names in the Shahnameh, "Jemshid," "Feridún," and "Garshasp," can be traced back to three heroes mentioned in the Zendavesta as the representatives of the three earliest generations of mankind, "Yima Kshaêta," "Thraêtana," and "Keres'âs'pa," and that the prototypes of these Zoroastrian heroes could be found again in the "Yama," "Trita," and "Kris'âs'va" of the Veda. He went even beyond this. He showed that, as in Sanskrit, the father of Yama is "Vivasvat," the father of Yima in the Avesta is "Vivanghvat." He showed that as Thraêtana in Persia is the son of "Athwya," the patronymic of Trita in the Veda is "Aptya." He explained the transition of Thraêtana into Feridún by pointing to the Pehlevi form of the name, as given by Nériosengh, Phredún. This change of an

aspirated dental into an aspirated labial, which by many is considered a flaw in this argument, is of frequent occurrence. We have only to think of φήρ and θήρ, of dhûmâ and fumus, of modern Greek φέλω and θέλω—nay Menenius's "first complaint," would suffice to explain it. Burnouf again identified Zohâk, the king of Persia, slain by Feridún, whom even Firdusi still knows by the name of "Ash dahâk," with the "Aji dahâka," the biting serpent, as he translates it, destroyed by Thraêtana in the Avesta; and with regard to the changes which these names, and the ideas originally expressed by them, had to undergo on the intellectual stage of the Arian nation, he says: "Il est sans contredit fort curieux de voir une des Divinités indiennes les plus vénérées, donner son nom au premier souverain de la dynastie ario-persanne; c'est un des faits qui attestent le plus évidemment l'intime union des deux branches de la grande famille qui s'est étendue, bien de siècles avant notre ère, depuis le Gange jusqu'à l'Euphrate."

Some more minute coincidences, particularly in the story of Feridún, have subsequently been added by Roth, Benfey, and Weber. The first, particularly, has devoted two most interesting articles to the identification of Yama-Yima-Jemshid and Trita-Thraêtana-Feridún. Trita, who has generally been fixed upon as the Vaidik original of Feridún, because Traitana, whose name corresponds more accurately, occurs but once in the Rig-Veda, is represented in India as one of the many divine powers ruling the firmament, destroying darkness, and sending rain, or, as the poets of the Veda are fond of expressing it, rescuing the cows and slaying the demons that had carried them off. These cows always move along the sky, some dark, some bright-coloured. They low over their pasture; they are gathered by the winds; and milked by the bright rays of the sun, they drop from their heavy udders a fertilising milk upon the parched and thirsty earth. But sometimes, the poet says, they are carried off by robbers and kept in dark caves

near the uttermost ends of the sky. Then the earth is without rain; the pious worshipper offers up his prayer to Indra, and Indra rises to conquer the cows for him. He sends his dog to find the scent of the cattle, and after she has heard their lowing, she returns, and the battle commences. Indra hurls his thunderbolt; the Maruts ride at his side; the Rudras roar; till at last the rock is cleft asunder, the demon destroyed, and the cows brought back to their pasture. This is one of the oldest myths or sayings current among the Arian nations. It appears again in the mythology of Italy, in Greece, in Germany. In the Avesta, the battle is fought between Thraêtana and Aji dahâka, the destroying serpent. Traitana takes the place of Indra in this battle in one song of the Veda; more frequently it is Trita, but other gods also share in the same honour. The demon, again, who fights against the gods is likewise called Ahi, or the serpent, in the Veda. But the characteristic change that has taken place between the Veda and Avesta is that the battle is no longer a conflict of gods and demons for cows, nor of light and darkness for rain. It is the battle of a pious man against the power of evil. "Le Zoroastrisme," as Burnouf says, "en se détachant plus franchement de Dieu et de la nature, a certainement tenu plus de compte de l'homme que n'a fait le Brahmanisme, et on peut dire qu'il a regagné en profondeur ce qu'il perdait en étendue. Il ne m'appartient pas d'indiquer ici ce qu'un système qui tend à développer les instincts les plus nobles de notre nature, et qui impose à l'homme, comme le plus important de ses devoirs, celui de lutter constamment contre le principe du mal, a pu exercer d'influence sur les destinées des peuples de l'Asie, chez lesquels il a été adopté à diverses époques. On peut cependant déjà dire que le caractère religieux et martial tout à la fois, qui paraît avec des traits si héroïques dans la plupart des Jeshts, n'a pas dû être sans action sur la mâle discipline sous laquelle ont grandi les commencements de la monarchie de Cyrus."

A thousand years after Cyrus (for Zohâk is mentioned

by Moses of Khorene in the fifth century) we find all this forgotten once more, and the vague rumours about Thraêtana and Aji Dahâka are gathered at last, and arranged and interpreted into something intelligible to later ages. Zohâk is a three-headed tyrant on the throne of Persia—three-headed, because the Vaidik Ahi was three-headed, only that one of Zohâk's heads has now become human. Zohâk has killed Jemshid of the Peshdadian dynasty: Feridún now conquers Zohâk on the banks of the Tigris. He then strikes him down with his cow-headed mace, and is on the point of killing him, when, as Firdusi says, a supernatural voice whispered in his ear*—

"Slay him not now, his time is not yet come,
His punishment must be prolonged awhile;
And as he cannot now survive the wound,
Bind him with heavy chains—convey him straight
Upon the mountain, there within a cave,
Deep, dark, and horrible—with none to soothe
His sufferings, let the murderer lingering die.
The work of heaven performing, Feridún
First purified the world from sin and crime.
Yet Feridún was not an angel, nor
Composed of musk and ambergris. By justice
And generosity he gained his fame.
Do thou but exercise these princely virtues,
And thou wilt be renowned as Feridún."

As a last stage in the myth of the Vaidik Traitana, we may mention versions like those given by Sir John Malcolm and others, who see in Zohâk the representative of an Assyrian invasion lasting during the thousand years of Zohâk's reign, and who change Feridún into Arbaces the Mede, the conqueror of Sardanapalus. We may then look at the whole with the new light which Burnouf's genius has shed over it, and watch the retrograde changes of Arbaces into Feridún, of Feridún into

* Cf. Atkinson's Shahnameh, p. 48.

Phredún, of Phredún into Thraêtana, of Thraêtana into Traitana, — each a separate phase in the dissolving view of Mythology.

As to the language of Persia, its biography is at an end with the Shahnameh. What follows exhibits hardly any signs of either growth or decay. The language becomes more and more encumbered with foreign words; but the grammar seems to have arrived at its lowest ebb, and withstands further change. From this state of grammatical numbness, languages recover by a secondary formation, which grows up slowly and imperceptibly at first in the speech of the people; till at last the reviving spirit rises upwards, and sweeps away, like the waters in spring, the frozen surface of an effete government, priesthood, literature, and grammar."

FOURTH CHAPTER.

THE LAST RESULTS OF THE SANSKRIT RESEARCHES IN COMPARATIVE PHILOLOGY.

(Reported by Professor MAX MÜLLER.)

THE only key to an understanding of the ancient literature of Media and Persia is furnished by the language of India, and more particularly by that primitive form of it which has been preserved in the hymns of the Veda—the first literary monument of the Arian world.

The main stream of the Arian nations has always flowed towards the north-west. No historian can tell us by what impulse these adventurous Nomads were driven on through Asia towards the isles and shores of Europe. The first start of this world-wide migration belongs to a period far beyond the reach of documentary history; to times when the soil of Europe had not been trodden by either Celts, Germans, Slavonians, Romans, or Greeks. But whatever it was, the impulse was as irresistible as the spell which, in our own times, sends the Celtic tribes towards the prairies or the regions of gold across the Atlantic. It requires a strong will, or a great amount of inertness, to be able to withstand the impetus of such national, or rather ethnical, movements. Few will stay behind when all are going. But to let one's friends depart, and then to set out ourselves—to take a road which, lead where it may, can never lead us to join those again who speak our language and worship our gods—is a course which only men of strong individuality and great self-dependence are capable of pursuing. It was the course adopted

by the southern branch of the Arian family, the Brahmanic Aryas of India and the Zoroastrians of Iran.

At the first dawn of traditional history we see these Arian tribes migrating across the snow of the Himálaya southward toward the "Seven Rivers" (the Indus, the five rivers of the Penjáb and the Sarasvatî), and ever since India has been called their home. That before this time they had been living in more northern regions, within the same precincts with the ancestors of the Greeks, the Italians, Slavonians, Germans and Celts, is a fact as firmly established as that the Normans of William the Conqueror were the Northmen of Scandinavia. The evidence of language is irrefragable, and it is the only evidence worth listening to with regard to ante-historical periods. It would have been next to impossible to discover any traces of relationship between the swarthy natives of India and their conquerors whether Alexander or Clive, but for the testimony borne by language. What other evidence could have reached back to times when Greece was not yet peopled by Greeks, nor India by Hindus? Yet these are the times of which we are speaking. What authority would have been strong enough to persuade the Grecian army, that their gods and their hero ancestors were the same as those of King Porus, or to convince the English soldier that the same blood was running in his veins and in the veins of the dark Bengalese? And yet there is not an English jury now a days, which, after examining the hoary documents of language, would reject the claim of a common descent and a legitimate relationship between Hindu, Greek, and Teuton. Many words still live in India and in England, that have witnessed the first separation of the northern and southern Arians, and these are witnesses not to be shaken by any cross-examination. The terms for God, for house, for father, mother, son, daughter, for dog and cow, for heart and tears, for axe and tree, identical in all the Indo-European idioms, are like the watchwords of soldiers. We

challenge the seeming stranger; and whether he answer with the lips of a Greek, a German, or an Indian, we recognise him as one of ourselves. Though the historian may shake his head, though the physiologist may doubt, and the poet scorn the idea, all must yield before the facts furnished by language. There *was* a time when the ancestors of the Celts, the Germans, the Slavonians, the Greeks, and Italians, the Persians, and Hindus, were living together beneath the same roof, separate from the ancestors of the Semitic and Turanian races.

It is more difficult to prove that the Hindu was the last to leave this common home, that he saw his brothers all depart towards the setting sun, and that then, turning towards the south and the east, he started alone in search of a new world. But as in his language and in his grammar he has preserved something of what seems peculiar to each of the northern dialects singly, as he agrees with the Greek and the German where the Greek and the German seem to differ from all the rest, and as no other language has carried off so large a share of the common Arian heirloom — whether roots, grammar, words, myths, or legends — it is natural to suppose that, though perhaps the eldest brother, the Hindu was the last to leave the central home of the Arian family.

The Arian nations who pursued a north-westerly direction, stand before us in history as the principal nations of north-western Asia and Europe. They have been the prominent actors in the great drama of history, and have carried to their fullest growth all the elements of active life with which our nature is endowed. They have perfected society and morals, and we learn from their literature and works of art the elements of science, the laws of art, and the principles of philosophy. In continual struggle with each other and with Semitic and Chamitic races, these Arian nations have become the rulers of history, and it seems to be their mission to link all parts of the world together by the chains of civilisation, commerce, and

religion. In a word, they represent the Arian man in his historical character.

But while most of the members of the Arian family followed this glorious path, the southern tribes were slowly migrating towards the mountains which gird the north of India. After crossing the narrow passes of the Hindukush or the Himálaya, they conquered or drove before them, as it seems without much effort, the aboriginal inhabitants of the Trans-Himalayan countries. They took for their guides the principal rivers of Northern India, and were led by them to new homes in their beautiful and fertile valleys. It seems as if the great mountains in the north had afterwards closed for centuries their Cyclopean gates against new immigrations, while, at the same time, the waves of the Indian Ocean kept watch over the southern borders of the peninsula. None of the great conquerors of antiquity — Sesostris, Semiramis, Nebuchadnezzar, or Cyrus, disturbed the peaceful seats of these Arian settlers. Left to themselves in a world of their own, without a past, and without a future before them, they had nothing but themselves to ponder on. Struggles there must have been in India also. Old dynasties were destroyed, whole families annihilated, and new empires founded. Yet the inward life of the Hindu was not changed by these convulsions. His mind was like the lotus leaf after a shower of rain has passed over it; his character remained the same, passive, meditative, quiet, and thoughtful. A people of this peculiar stamp was never destined to act a prominent part in the history of the world; nay, the exhausting atmosphere of transcendental ideas could not but exercise a detrimental influence on the active and moral character of the Indians. Social and political virtues were little cultivated, and the ideas of the useful and the beautiful hardly known to them. With all this, however, they had, what the Greek was as little capable of imagining, as they were of realising, the elements of Grecian life. They shut their eyes to this world

of outward seeming and activity, to open them full on the world of thought and rest. The ancient Hindus were a nation of philosophers, such as could nowhere have existed except in India, and even there in early times alone. It is with the Hindu mind as if a seed were placed in a hothouse. It will grow rapidly, its colours will be gorgeous, its perfume rich, its fruits precocious and abundant. But never will it be like the oak growing in wind and weather, and striking its roots into real earth, and stretching its branches into real air beneath the stars and the sun of heaven. Both are experiments, the hothouse flower and the Hindu mind; and as experiments, whether physiological or psychological, both deserve to be studied.

We may divide the whole Arian family into two branches, the northern and the southern. The northern nations, Celts, Greeks, Romans, Germans, and Slavonians, have each one act allotted to them on the stage of history. They have each a national character to support. Not so the southern tribes. They are absorbed in the struggles of thought, their past is the problem of creation, their future the problem of existence; and the present, which ought to be the solution of both, seems never to have attracted their attention, or called forth their energies. There never was a nation believing so firmly in another world, and so little concerned about this. Their condition on earth is to them a problem; their real and eternal life a simple fact. Though this is said chiefly with reference to them before they were brought in contact with foreign conquerors, traces of this character are still visible in the Hindus, as described by the companions of Alexander, nay, even in the Hindus of the present day. The only sphere in which the Indian mind finds itself at liberty to act, to create, and to worship, is the sphere of religion and philosophy; and nowhere have religious and metaphysical ideas struck root so deep in the mind of a nation as in India. The shape which these ideas took amongst the different classes of society, and at

different periods of civilisation, naturally varies from coarse superstition to sublime spiritualism. But, taken as a whole, history supplies no second instance where the inward life of the soul has so completely absorbed all the other faculties of a people.

It was natural, therefore, that the literary works of such a nation, when first discovered in Sanskrit MSS. by Wilkins, Sir W. Jones, and others, should have attracted the attention of all interested in the history of the human race. A new page in man's biography was laid open, and a literature as large as that of Greece or Rome was to be studied. The laws of Manu, two epic poems, the Râmâyana and Mahâbhârata, six complete systems of philosophy, works on astronomy and medicine, plays, stories, fables, elegies, and lyrical effusions, were read with intense interest, on account of their age not less than their novelty.

Still this interest was confined to a small number of students, and in a few cases only could Indian literature attract the eyes of men who, from the summit of universal history, surveyed the highest peaks of human excellence. Herder, Schlegel, Humboldt, and Goethe, discovered what was really important in Sanskrit literature. They saw what was genuine and original, in spite of much that seemed artificial. For the artificial, no doubt, has a wide place in Sanskrit literature. Everywhere we find systems, rules and models, castes and schools, but nowhere individuality, no natural growth, and but few signs of strong originality and genius.

There is, however, one period of Sanskrit literature which forms an exception, and which will maintain its place in the history of mankind, when the name of Kalidâsa and Sakuntalâ will have been long forgotten. It is the most ancient period, the period of the Veda. There is, perhaps, a higher degree of interest attaching to works of higher antiquity; but in the Veda we have more than mere antiquity. We have ancient thought

expressed in ancient language. Without insisting on the fact that even chronologically the Veda is the first book of the Arian nations, we have in it, at all events, a period in the intellectual life of man to which there is no parallel in any other part of the world. In the hymns of the Veda we see man left to himself to solve the riddle of this world. We see him crawling on like a creature of the earth with all the desires and weaknesses of his animal nature. Food, wealth, and power, a large family and a long life, are the theme of his daily prayers. But he begins to lift up his eyes. He stares at the tent of heaven, and asks who supports it? He opens his ears to the winds, and asks them whence and whither? He is awakened from darkness and slumber by the light of the sun, and him whom his eyes cannot behold, and who seems to grant him the daily pittance of his existence, he calls "his life, his breath, his brilliant Lord and Protector." He gives names to all the powers of nature, and after he has called the fire *Agni*, the sun-light *Indra*, the winds *Maruts*, and the dawn *Ushas*, they all seem to grow naturally into beings like himself, nay, greater than himself. He invokes them, he praises them, he worships them. But still with all these goods around him, beneath him, and above him, the early poet seems ill at rest within himself. There too, in his own breast, he has discovered a power that wants a name, a power nearer to him than all the gods of nature, a power that is never mute when he prays, never absent when he fears and trembles. It seems to inspire his prayers, and yet to listen to them; it seems to live in him, and yet to support him and all around him. The only name he can find for this mysterious power is *Brahma;* for *brahma* means originally force, will, wish, and the propulsive power of creation. But this impersonal *brahma*, too, as soon as it is named, grows into something strange and divine. It becomes *Brahmanaspati*, the Lord of power; an epithet applicable to many gods in their toils and their victories. And still the voice within him has no real name; that power

which is nothing but itself, which supports the gods, the heavens, and every living being, floats before his mind, conceived but not expressed. At last he calls it *Atma;* for *âtma* means Self and Self alone—Self whether divine or human, Self whether creating or suffering, Self whether one or all, but always Self, independent and free. "Who has seen the first-born," says the poet, "when he who has no bones (i. e. form) bore him that had bones? Where was the life, the blood, the Self of the world? Who went to ask this from any that knew it?" This idea of a divine Self once expressed, everything else must acknowledge its supremacy, "The gods themselves came later into being—Who knows from whence this great creation sprang?"

This *Atma* also grew; but it grew, as it were, without attributes. The sun is called the Self of all that moves and rests, and still more frequently "self" becomes a mere pronoun. But *Atma* remained always free from myth and worship, differing in this from the *Brahma* (neuter), who in later times was worshipped as *Brahmâ* (mascul.), together with Vishnu and Siva, and other popular gods. The idea of the *Atma* or Self, like a pure crystal, was too transparent for poetry, and therefore was handed over to philosophy, which afterwards polished, and turned, and watched it as the medium through which all is seen, and in which all is reflected and known. But philosophy is later than the Veda, and it is of the Vaidik period only I have here to speak.

In the Veda, then, we can study a "theogony" of which that of Hesiod is but the last chapter. We can study man's natural growth, and the results to which it may lead under the most favourable conditions. All was given him that nature can bestow. We see him blest with the choicest gifts of the earth, under that glowing sky, surrounded by all the grandeur and all the riches of nature, with a language "capable of giving soul to the objects of sense, and body to the abstractions of metaphysics." We have a right to expect much from him, only we must

not expect in these youthful poems the philosophy of the nineteenth century, or the beauties of Pindar, or, with some again, the truths of Christianity. Few understand children, still fewer understand antiquity. If we look in the Veda for high poetical diction, for striking comparisons, for bold combinations, we shall be disappointed. These early poets thought more for themselves than for others. They sought rather, in their language, to be true to their own thought than to please the imagination of their hearers. With them it was a great work achieved for the first time to bind thoughts and words together, to find expressions or to form new names. As to similes, we must look to the words themselves, which, if we compare their radical and their nominal meaning, will be found full of bold metaphors. No translation in any modern language can do them justice. As to beauty, we must discover it in the absence of all effort, and in the simplicity of their hearts. Prose was, at that time, unknown, as well as the distinction between prose and poetry. It was the attempted imitation of those ancient natural strains of thought which in later times gave rise to poetry in our sense of the word, that is to say, to poetry as an art, with its counted syllables, its numerous epithets, its rhyme and rhythm, and all the conventional attributes of "measured thought."

In the Veda itself, however — even if by Veda we mean the Rig-Veda only (the other three, the Sâma, Yajur, and Atharvana, having solely a liturgical interest, and belonging to an entirely different sphere)—in the Rig-Veda also, we find much that is artificial, imitated, and therefore modern, if compared with other hymns. It is true that all the 1017 hymns of the Rig-Veda were comprised in a collection which existed as such before one of those elaborate theological commentaries, known under the name of Brâhmana, was written, that is to say, about 800 B.C. But before the date of their collection these must have existed for centuries. In different songs the names of different kings occur, and we see several generations of royal

families pass away before us with different generations of poets. Old songs are mentioned, and new songs. Poets whose compositions we possess are spoken of as the seers of olden times; their names in other hymns are surrounded by a legendary halo. In some cases, whole books or chapters may be pointed out as more modern and secondary, in thought and language. But on the whole the Rig-Veda is a genuine document, even in its most modern portions not later than the time of Lycurgus; and it exhibits one of the earliest and rudest phases in the history of mankind; disclosing in its full reality a period of which in Greece we have but traditions and names, such as Orpheus and Linus, and bringing us as near the beginnings in language, thought, and mythology as literary documents can ever bring us in the Arian world.

Though much time and labour have been spent on the Veda, in England and in Germany, the time is not yet come for translating it as a whole. It is possible and interesting to translate it literally, or in accordance with scholastic commentaries, such as we find in India from Yâska in the 4th century B.C. down to Sâyaṇa, in the 14th century of the Christian era. This is what Professor Wilson has done in his translation of the first book of the Rig-Veda; and by strictly adhering to this principle and excluding conjectural renderings even where they offered themselves most naturally, he has imparted to his work a definite character and a lasting value. The grammar of the Veda, though irregular, and still in a rather floating state, has almost been mastered; the etymology and the meaning of many words, unknown in the later Sanskrit, have been discovered. Many hymns, which are mere prayers for food, for cattle, or for a long life, have been translated, and can leave no doubt as to their real intention. But with the exception of these simple petitions, the whole world of ideas is so entirely beyond our own intellectual horizon, that instead of translating we can as yet only guess and combine. Here it is no longer a mere

question of skilful decyphering. We may collect all the passages where an obscure word occurs, we may compare them and look for a meaning which would be appropriate to all; but the difficulty lies in finding a sense which we can appropriate and transfer by analogy into our own language and thought. We must be able to translate our feelings and ideas into their language at the same time that we translate their poems and prayers into our language. We must not despair even where their words seem meaningless and their ideas barren or wild. What seems at first childish may at a happier moment disclose a sublime simplicity, and even in helpless expressions we may recognise aspirations after some high and noble idea. When the scholar has done his work, the poet and philosopher must take it up and finish it. Let the scholar collect, collate, sift, and reject — let him say what is possible or not according to the laws of the Vaidik language — let him study the commentaries, the Sûtras, the Brâhmanas, and even later works, in order to exhaust all the sources from which information can be derived. He must not despise the tradition of the Brahmans, even where their misconceptions and the causes of their misconceptions are palpable. To know what a passage cannot mean is frequently the key to its real meaning; and whatever reasons may be pleaded for declining a careful perusal of the traditional interpretations of Yâska or Sâyana, they can all be traced back to an ill-concealed "argumentum paupertatis." Not a corner in the Brâhmanas, the Sûtras, Yâska, and Sâyana should be left unexplored before we venture to propose a rendering of our own. Sâyana, though the most modern, is on the whole the most sober interpreter. Most of his etymological absurdities must be placed to Yâska's account, and the optional renderings which he allows for metaphysical, theological, or ceremonial purposes, are mostly due to his regard for the Brâhmanas. The Brâhmanas, though nearest in time to the hymns of the Rig-Veda, indulge in the most frivolous and ill-judged interpretations. When the ancient Rishi

exclaims with a troubled heart, "Who is the greatest of the gods? Who shall first be praised by our songs?"—the author of the Brâhmaṇa sees in the interrogative pronoun "Who" some divine name, a place is allotted in the sacrificial invocations to a god "Who," and hymns addressed to him are called "Whoish" hymns. To make such misunderstandings possible, we must assume a considerable interval between the composition of the hymns and the Brâhmaṇas. As the authors of the Brâhmaṇas were blinded by theology, the authors of the still later Niruktas were deceived by etymological fictions, and both conspired to mislead by their authority later and more sensible commentators, such as Sâyaṇa. Where Sâyaṇa has no authority to mislead him, his commentary is at all events rational; but still his scholastic notions would never allow him to accept the free interpretation which a comparative study of these venerable documents forces upon the unprejudiced scholar. We must therefore discover ourselves the real vestiges of these ancient poets; and if we follow them cautiously, we shall find that with some effort we are still able to walk in their footsteps. We shall feel that we are brought face to face and mind to mind with men yet intelligible to us, after we have freed ourselves from our modern conceits. We shall not succeed always: words, verses, nay, whole hymns in the Rig-Veda, will and must remain to us a dead letter. But where we can inspire those early relics of thought and devotion with new life, we shall have before us more real antiquity than in all the inscriptions of Egypt or Nineveh; not only old names and dates, and kingdoms and battles, but old thoughts, old hopes, old faith, and old errors, the old "Man" altogether — old now, but then young and fresh, and simple and real in his prayers and in his praises.

The thoughtful bent of the Hindu mind is visible in the Veda also, but his mystic tendencies are not yet so fully developed. Of philosophy we find but little, and what we find is still in its germ. The active side of life is more pro-

minent, and we meet occasionally with wars of kings, with rivalries of ministers, with triumphs and defeats, with war-songs and imprecations. Moral sentiments and worldly wisdom are not yet absorbed by phantastic intuitions. Still the child betrays the passions of the man, and there are hymns, though few in number, in the Veda, so full of thought and speculation that at this early period no poet in any other nation could have conceived them. I give but one specimen, the 129th hymn of the tenth book of the Rig-Veda. It is a hymn which long ago attracted the attention of that eminent scholar, H. T. Colebrooke, and of which, by the kind assistance of a friend, I am enabled to offer a metrical translation. In judging it we should bear in mind that it was not written by a Gnostic or by a pantheistic philosopher, but by a poet who felt all these doubts and problems as his own, without any wish to convince or to startle, only uttering what had been weighing on his mind, just as later poets would sing the doubts and sorrows of their love.

Nor Aught nor Nought existed; yon bright sky
Was not, nor heaven's broad woof outstretched above.
What covered all? what sheltered? what concealed?
Was it the water's fathomless abyss?
There was not death—yet was there nought immortal,
There was no confine betwixt day and night;
The only One breathed breathless by itself,
Other than It there nothing since has been.
Darkness there was, and all at first was veiled
In gloom profound—an ocean without light—
The germ that still lay covered in the husk
Burst forth, one nature, from the fervent heat.
Then first came love upon it, the new spring
Of mind—yea, poets in their hearts discerned,
Pondering, this bond between created things
And uncreated. Comes this spark from earth
Piercing and all-pervading, or from heaven?
Then seeds were sown, and mighty powers arose—

Nature below, and power and will above —
Who knows the secret? who proclaimed it here,
Whence, whence this manifold creation sprang?
The Gods themselves came later into being —
Who knows from whence this great creation sprang?
He from whom all this great creation came,
Whether his will created or was mute,
The Most High Seer that is in highest heaven,
He knows it — or perchance even He knows not.

The grammar of the Veda (to turn from the contents to the structure of the work) is important in many respects. The difference between it and the grammar of the epic poems would be sufficient of itself to fix the distance between these two periods of language and literature. Many words have preserved in these early hymns a more primitive form, and therefore agree more closely with cognate words in Greek or Latin. Night, for instance, in the later Sanskrit is *nis'â*, which is a form peculiarly Sanskritic, and agrees in its derivation neither with *nox* nor with *νύξ*. The Vaidik *nak*, night, is as near to Latin as can be. Thus "mouse" in the common Sanskrit is *mûshas* or *mûshikâ*, both derivative forms if compared with the Latin *mus, muris*. The Vaidik Sanskrit has preserved the same primitive noun in the plural, *mûshas* = mures. There are other words in the Veda which were lost altogether in the later Sanskrit, while they were preserved in Greek and Latin. *Dyaus*, sky, does not occur as a masculine in the ordinary Sanskrit; it occurs in the Veda, and thus bears witness to the early Arian worship of Dyaus, the Greek Zeús. *Ushas*, dawn, again in the later Sanskrit is neuter. In the Veda it is feminine; and even the secondary Vaidik form *Ushâsâ* is proved to be of high antiquity by the corresponding Latin form *Aurora*. Declension and conjugation are richer in forms and more unsettled in their usage. It was a curious fact, for instance, that no subjunctive mood existed in the common Sanskrit. The Greeks and Romans had

it, and even the language of the Avesta showed clear traces of it. There could be no doubt that the Sanskrit also once possessed this mood, and at last it was discovered in the hymns of the Rig-Veda. Discoveries of this kind may seem trifling, but they are as delightful to the grammarian as the appearance of a star long expected and calculated is to the astronomer. They prove that there is natural order in language, and that by a careful induction laws can be established which enable us to guess with great probability either at the form or meaning of words where but scanty fragments of the tongue itself have come down to us.

FIFTH CHAPTER.

THE LAST RESULTS OF THE CELTIC RESEARCHES.

(Reported by Dr. Charles Meyer.)

To Dr. Pritchard the honour is due of having first applied Bopp's principle of comparative grammatical analysis to the Celtic family, in which he was followed by Bopp himself, and by Adolphe Pictet (1837). Doctor Charles Meyer, in his Lecture read before the British Association at Oxford in 1847, was, however, the first to apply the whole machinery of linguistic comparative philology to that ancient and important branch of the Iranian stock. Having resided for some years among the Kymri bards, and learned to read, speak, and write their language, he was well qualified for treating it linguistically and ethnologically. I have, therefore, thought it advisable to extract from that Lecture (which has scarcely had any circulation beyond the readers of the Transactions of the Association) everything which appeared suitable for a Scientific Report such as was required in this place.

It will be seen from this Essay that my excellent friend has made a great step towards connecting the Celtic languages with the problems and theories of the other branches of the Indo-European family. Doctor Meyer has laid the foundation of primitive Celtic ethnology. He has applied to this stock Grimm's scale of sounds, and proposed an improvement upon that law. He has been the first to discover the law which regulates the Celtic transmutations of initial consonants, and that of the vowels. By these two discoveries he has extended and improved Bopp's method of grammatical comparison. Finally, he has observed that the non-Sanskritic elements of Celtic form the link by which the Indo-European family approaches the Turanian formations. The truth and importance of this remark will soon become apparent to my readers.

It results, at all events, from these researches, as well as from those of Diefenbach (Celtica, 1840), that the Celtic is the least developed branch of the Indo-European family. It cannot be considered as having, in the course of ages, been stripped of that luxuriancy of forms which the Asian and Germanic languages exhibit. On the contrary, all the phenomena before us lead us to conclude that the Celtic language crystallized before that wonderful development of organic forms burst forth. This view is not in contradiction to the assumption that, like all other languages, the Celtic also has gradually been losing forms, and using up and remodelling roots. On the contrary, it is demonstrable from the monuments before us, that such changes have taken place in Celtic. Of this the Grammatica Celtica of Zeuss, two volumes of which have just been published, contains new proofs. Now this fact, once admitted, must lead to some important conclusions as to the general development of that great family of languages, and as to the primordial history of mankind. What we see fixed in Celtic must have been a floating point in the members of the family of which Celtic forms an internal part, and must have been a point of transition in all other tongues of that stock. The phenomenon presented to us by the Egyptian language, if compared with the Aramaic and Iranian, is therefore not an isolated one, but appears rather to be the indication of some general law of development. As to an alphabet, the Celts never had any of their own; they brought none from the East, and acquired none in Europe.

I.

Historical Introduction. — The Origin of the Celtic Tribes, and their Migrations.

MODERN Europe possesses two great dialects or languages each composed of three separate idioms, which exhibit what we may call

the *modern Celtic*. The word *Celtic* I use as a generic name for all the different idioms and dialects, evidently united amongst themselves by a systematic family-likeness of grammatical features, once spoken by the different nations and tribes, which in the Greek and Latin records of ancient history are usually designated under the general name of Κέλται (Κελτοί) and Celtæ*, and still spoken by their descendants. The two great dialects of modern Celtic are given, each with its three subdivisions, of which only one is actually extinct, in the following table:

1. The Gallic or British, comprehending
   - *a.* The Cymric or Welsh.
   - *b.* The Cornish (extinct).
   - *c.* The Armorican or dialect of Brittany (Bas Breton).
2. The Gaelic (Gadhelic) or Erse, comprehending
   - *a.* The Fenic or Irish.
   - *b.* The Highland Scottish (Gaelic).
   - *c.* The Manx.†

It appears from this, that five of the modern Celtic dialects, and four of those still extant, belong to *this* country, while the sixth, the Armorican or the dialect of Brittany, belongs to a district which, although situated in a foreign country, yet is British as to population, having been entirely colonized by British settlers, in the

* Uckert's Geography, vol. ii. p. 186.

† This table is on the whole the same as that given by Dr. Prichard in his "*Eastern Origin of the Celtic Nation.*" I have only added the names *Gallic* and *Fenic*, both of which are of too frequent occurrence, and of two significative import in the ancient national records (particularly the Irish), not to find a place in a pedigree of the Celtic. As for the etymology of the two principal words of this pedigree, I derive the word *Gadhel, Gael* (Irish: Gaodhal, Gaoidhal, Gaedhil) from an old Celtic root *gwydh, sequi, comitari,* — preserved (with the regular change of *gw* into *f*) in the Irish words *fuidh-im, sequor, comitor; feadhan, comitatus, clientela; feadha, patronus; feidhil, cliens* — so as to give to the word *Gadhel, Gael* the signification *follower*, with reference either to the nomadic propensities and practices of the whole tribe, or to their habit of living in clanships. The name *Gall* (*Gallus, Gaul*), although used by Irish writers in direct opposition to that of *Gael*, to such an extent as to have acquired the general signification of *foreigner*, I am still inclined to consider as another more mutilated form of the same word, namely, a contraction of *Gwadhal* or *Gwodhal*. (Cf. the name of *S. Vodoalus.*)

fourth and fifth centuries of our era, and named by them after their mother-country, the latter being henceforth distinguished from its colony by the name of *Great* Britain.* Hence a land which, as Cæsar tells us, was once the acknowledged classical seat of Druidical discipline, and, we may therefore infer, of the Druidical or ancient Celtic language and literature, is also the principal seat of the modern Celtic, which originated there exclusively.

English readers may perhaps be astonished to find that, in proposing the scientific use of the expression *Ancient and Modern Celtic*, and in explaining its meaning, I have tacitly assumed as fact a point which, of all those left to the investigation of comparative Celtic philology, obviously most requires to be proved, namely, the real general identity of the two languages, or, to speak more accurately, the two ages of language which we have called Ancient and Modern Celtic. But every one, however slightly acquainted with modern Celtological literature, must be aware that this identity has already been made the subject of so many extensive investigations, and has received so many clear demonstrations, as not to require additional proof. The important fact that all the words, significative names and phrases, occasionally quoted by Greek and Latin authors

* This colonization of Brittany, which in the historic records of the Cymry (Trioedd, Vaughan, 7.) is attributed to *Cynan Meiriadawc*, contemporary of Macsen Wledic (Emperor Maximus), has conferred upon this hero, in very early legends preserved both in the Welsh and Gaelic literature, the renown of a descent into hell and victory over the infernal spirits, a fiction which doubtless originated in the supposed identity between the realms of death and the lands beyond the sea. V. Gododin, v. 196. (Myvyrian, i. p. 4.):

Ni dyvu o Vrython
Wr well no *Chynon*
Sarph Seri Alon.

(There did not come from the land of Britons a man better than Cynon, the sun-like conqueror of the infernal spirits.) Cf. God. v. 367. 545. 583. 586.; Mackintosh's Gaelic Proverbs (1819), pp. 24. 203.; W. Scott's Waverley, cap. 19.; Macpherson's Ossian, vol. i. pp. 148. 154. The character, at once bold and good-humoured, under which the Gaelic tradition represents Cynan or Conan, enables us to recognize in him the type of several other legendary heroes of a similar stamp, whose history is a copious and amusing theme for the nursery-tales of nearly every country of Europe; *e. g.* Der Schmied von Apolda; Bruder Lustig; Frère Moustache; V. Grimm's Deutsche Märchen, Notes, No. 81.; Emile Souvesire, Derniers Bretons, p. 176.

from the language of the several Celtic tribes, occur, with nearly the same specific form and meaning, and moreover, with their full etymological explanations, in dialects which we are for this very reason justified in calling modern Celtic—a fact which involves the grammatical identity of the two languages in question—has for several centuries engaged the attention of the learned. Noticed first by Du Fresne, and afterwards more strongly insisted on by the school of the so-called *Celtomanians*, who, with all their voluminous researches, have not contributed to the elucidation of any other point, it has since been brought before the public in a more compendious and judicious form in several modern books, among which I need only mention Dr. Prichard's Ethnography of the Celtic Race, and Diefenbach's Celtica.

When we consider the full import of this identity with reference to our knowledge of ancient geography and ethnography, we see at once that it is of itself sufficient to render the study of modern Celtic of the highest importance to the historian. The Celtic nation, whose language is still a living one among the modern Celtic tribes just enumerated, was, owing to its migratory instincts and habits, one of the most widely spread of all the nations of ancient and modern history, having at various periods covered with its settlements, and perhaps even possessed simultaneously, an extent of country reaching from the Pillars of Hercules to Asia Minor and beyond the Caspian, and from the banks of the Tiber to the *Ultima Thule* of Scotland and Greenland. Upon this considerable portion of the world, as well as the historical records referring to it, the Celtic nation has impressed a long series of names both of places and persons, which are not fully intelligible without a comparison with the modern Celtic.

I beg leave here to offer briefly my opinion as to the different lines of migration by which I conceive the Celtic race proceeded from Asia to Europe and finally to this country, and as to the intimate connexion which seems to exist between the difference of those lines and the great division of the whole race into two separate branches, corresponding with the two great dialects of modern Celtic, namely, the Gallic and Gaelic branches. Although it is beyond the scope of this Essay to give that opinion (the result of a long and

conscientious comparative examination of the extant Celtic national records) supported by all the arguments necessary to prove it, I have still thought it right to introduce a summary of it here by way of basis to the philological views I propose more particularly to develop. By introducing the etymology of several of the names which we shall have occasion to mention, this sketch of the history of Celtic migration will at the same time afford an opportunity of demonstrating the importance which we attribute to the study of the Celtic language with reference to ancient and modern ethnography.

It seems to me, then, that the Celtic nation transported itself from Asia, and more particularly from Asiatic Scythia, to Europe and to this country by two principal routes, which it resumed at different epochs, thus forming two great streams of migration which flow as it were periodically. The one, proceeding in a south-western direction, through Syria and Egypt and thence along the northern coast of Africa, reached Europe at the Pillars of Hercules, and passing on through Spain to Gaul, there divided itself into three branches. The northern branch terminated in Great Britain and Ireland; the southern in Italy; and the eastern, running along the Alps and the Danube, terminated near the Black Sea, not far from the point where the whole stream may probably have originated. The other great stream, taking a more direct course, reached Europe at its eastern limit; and passing through European Scythia, and from thence partly through Scandinavia, partly along the Baltic, through Prussia (the Polena of the Sagas and Pwyl of the Triads), and through Northern Germany, reached this country and hence the more western and northern islands across the German Ocean or *hazy sea* (*Mortawch*).

Of these two streams or lines of Celtic migration, which, with reference to this country, we may distinguish by the names of the *western* and *eastern* stream, the former, although the less direct, seems to be historically the more ancient, and to have reached this country several centuries before the other. The principal nations belonging to it are the Κέλται of Spain (to whom this name particularly refers) and the *Galli*, the latter being the parent stock of the three tribes which successively possessed this island and successively bestowed upon it the three names by which it is mentioned in the

records of classical and national literature. They each correspond with that of the tribe itself, being derived from the chief God worshipped by each tribe, on whom they always bestowed a two-fold character, a general one, as God of the sun, and a special one, as their own warlike leader and protector — their *heros eponymus*. These three tribes are the following :

1. The *Alwani* (Alauni, Alani), who derived their name from their God *Alw*, after whom they called this island *Alw-ion* (Ἀλονίων, Albion), *i. e.* the island of Alw.*

2. The *Aedui*, whose name is derived from their god *Aed* (the Aedd Mawr of the Triads), after whom they called this island *Aeddon* or *Eiddyn* (Edin), a name preserved in that of the town of Edinburgh (Welsh *Caer* or *Dinas Eiddyn*, Gaelic, *Din Eidin*).† The name under which the Aedui of Great Britain and Ireland are most frequently quoted, and which, contrasted with the other, may be called their secular name, is Brigantes (identical with the Welsh family name Brychan, and the Irish Breoghan), the derivation of which is the Welsh word *brych*, Gaelic *breag*, *fuscus*.

3. The *Britons* (Brython) whose name is derived from their god Bryt or Pryd (the Prydyn ap Aedd Mawr of the Triads), after whom they called this island *Brytain*, *Prydain* (Ynys Prydain), Great Britain.‡

* V. Baxter s. v. Alauni, Alo-Brites. The memory of the God *Alw* is preserved by the Triads under the name of *Alawn*, and by Nennius (2. 12. Gale) under that of *Alaunus*, grandfather of Brutus (i. e. Pryd). In the Triads of the three pillars of the British nation, — Triphost (? Tuisighin) Cenedl Ynys Prydain — the name of the Cymric god *Hu Gadarn* has been fraudulently substituted for that of *Alw*. The signification of the name *Alw* is still warranted by the Welsh word *Alaw* (light, music), and the Gaelic *Aluin* (bright, beautiful).

† V. Trioedd, Vaughan, 36. Trioedd, Rich. 79. cf. 50. Gododin, v. 155. (Eg. cyntedd Eiddyn). Ricardus Corineus, cp. 16. Britannia after the Romans, p. 74.

‡ Nennius, x. Britones venerunt *in tertia ætate* Mundi ad Britanniam. The word *ain*, in the compound *Pryd-ain*, which is synonymous with the words *ion* (in Alw-ion) and *yn* (in *Eidd-yn*), signifies circle, enclosure, island. The simple name of the god *Pryd* is preserved in one of the most ancient monuments of Welsh literature, a sacrificial hymn addressed to the god Pryd in his character as god of the sun. The text of this poem, as printed in the Myvyrian, or Welsh Archæology (vol. i. pp. 72, 73.), being very corrupt, I subjoin a literal prose translation of it in English, and a close metrical one in German :

The respective order in which these three names were bestowed upon the island, is also evident from the situation of those parts to which they became gradually applied after having lost their general signification, each tribe, which retreated on the arrival of fresh conquerors to a more northern part, attaching to the district which it occupied what had been once the name of the whole country. Thus the name *Albion*, the most ancient of the three, finally retired, together with the tribe from which it originated, to the most northern part of the country, which, under the form Albain or Alban, it still serves to designate: and the name *Prydain* itself, which has since resumed its general signification, in the poems of the old Welsh bards generally designates the western parts of the Scotch lowlands, whither the Britons had retired after the arrival of the Belgians.*

As the nations and tribes of this western migration are those to which the name of Celts and Gauls more particularly refers, so to them belong most of those characteristics and institutions of the Celtic race — including the important one of Druidism — with which we are made acquainted by Cæsar and Strabo. The language of the western Celts is in its most distinctive features represented by the British or Gallic branch of the modern Celtic.

Of the nations and tribes composing the *eastern migration*, the most celebrated are the so-called Picti and Scoti, who, from the

"Pryd, god of Great Britain, splendid Hu, listen to me! King of heaven, do not during my office hide thyself from me! A fair repast is spread before thee by the castle between the two lakes (a religious expression for Great Britain); the lakes surround the wall, the wall surrounds the city, the city invokes thee, king almighty: a pure offering stands before thee, a chosen victim in its sacrificial veil (instead of *mwyedig vain*, lege *vain vwyad*): O great serpent (a common epithet of the sun, referring to its circuitous course), encircle from above the place where the sacred vases stand."

"Pryd Prydain,	Fest dir beut	Schönes Opfer
Herr im Schein,	Die *Seeburg* heut,	Hier im Schleier
Höre mich:	*See* um *Wall*	Dir ich bring,
Himmelsfürst,	*Wall* um *Burg*	Goldner Drache,
Nicht im Dienst	*Burg* dich ruft,	Hold umfache
Umdüstre mich:	Herr, mit Schall!	Den Opferring!"

* V. Ymarwer Ludd Mawr, Myv. i. p. 31. b. Gwawdd Ludd y Mawr, ib. i. 75. b. (Tra mor Tra Brython). Kerdd am Veib. Llyr, ib. i. 67. b. Britannia after the Romans.

close of the third century of our era, have for a long period held a leading place in the history of this island. These two names correspond with analogous words in modern Gaelic: the one with the Irish *scuite, nomades* (coll. W. *ysgwyd*, E. *to scout*); the other with the Gaelic *pic-t-a, peic-t-ta* (Welsh, *peith*), *fighting man*, from the Gaelic *pic* (*beic, beuc*), Welsh, *peith, to scream, to fight* (cf. Anc.-G. *viht-an;* Lat. *pugn-a*). Far more characteristic, however, than these two names are those by which the Picti and Scoti are usually distinguished in the Welsh records. I mean the names *black and fair* (*red, white*) *Gàels, black and fair horde—Gwyddyl duon, llu du, ormes du* and *Gwyddyl gwyn, coch glas**—inasmuch as, according to the analogy of several Asiatic tribes†, this appellation seems to refer to a difference of blood, and to imply that the *black* Picti exhibited in their physical appearance a less pure Caucasian origin than the *fair* Scoti. The name *Fena* itself, under which the Scoti are almost invariably mentioned in their own records—the old Irish annals and poems — signifies *the fair ones*, being the plural of *Fion, fair*, which word is in this form the name of the heros eponymus of the whole tribe, the celebrated Fion Mac Cumhail (the Fion Gall of the Highlands). The ignorance of the monkish chroniclers of Ireland, who did not understand the meaning of the word *Fena*, was doubtless the cause of the wild notion, of the *Phœnician* origin of the Irish, being generally received—just as the story of the celebrated hero *Milesius*, as a distinct person, grew out of the ignorance of those chroniclers as to the true meaning of an epithet by which Fion (the heros eponymus of the Fena) is fre-

* V. Myvyr. i. 67. *a;* 134. *b;* 192. *a;* Triads, R., 8, 9.; cf. Dr. Smith, Sean Dana, p. 6. The earliest authors who mention the *Gwyddyl duon* under this name are Ammianus Marcellinus (xvii. 8.) and Ptolemæus (ii.3.); cf. Zosim. p. 440., since the form *Du-Caledones* (*Di-Caledones*) by which they mention them, evidently contains the Celtic word *du* or *dubh, black*, as the first term of this compound.

† The whole nation of the Tatars, for instance, were formerly divided into two great families, one of which, called the *black*, comprehended the Tatars of Mongolic race; the other, called the *white*, those of Caucasian. V. Ritter's Erdkunde, ii. pp. 255. 435. 437. 439. The division of the Huns into a black and white horde likewise refers to the same difference. Vide Guignes, ii. p. 235. Humboldt's Kosmos, ii. p. 220.

quently described by the old Irish bards, namely, the epithet "*Miledh*," the *warrior*. As regards the Irish tradition of the Fena having arrived from Spain and Africa, however, to say it has no foundation in history would be inconsistent with what we ourselves have said of the route of the western Celts. I have no hesitation in considering this tradition to refer either to that migration or to an anterior one, in which a nation of Scytho-Celtic (*Finno-Celtic*) race, including the ancient Iberi and the still extant Basque nation*, seems to have passed likewise along the African coast, to Spain as well as this country.

The time when the stream of this eastern migration first reached this island appears to have been the sixth century A. C., at which epoch, as we learn from Herodotus (iv. 13.), a general commotion took place amongst the different tribes and nations of Asiatic Scythia, similar to that which 400 years later became the primary cause of the great migration of the Teutonic tribes in the fourth and fifth century. This great commotion, described by Herodotus, which precipitated the eastern on the western tribes, and extended itself through the Cimmerii (Kymri, who then inhabited the shores of the Caspian) to European Scythia, finally brought the eastern Celts, in the central parts of Europe, into contact with the western, one of the results of which was the incursion of the Galli into Italy.

Among the Fena, the most illustrious were the *Ua-sin*, i. e. *light, fair tribe*, celebrated in Irish legends for its cultivation of the arts alike of war and peace, and for the number of bards as well as heroes it has produced. The beautiful poem of *Oighidh Llainne Uisnech* (the Death of the Sons of Uasin) contains, in a mythological and symbolical form, the story of the final destruction of this tribe in the northern part of Ireland, in consequence of a long series of combats between the warlike Fenish tribe and the Picti or Cruithne. There is no stronger proof of the poetic glory of the Ua-sin than the fact of the two greatest poetical names in Gaelic and Gallic literature,

* We may see an allusion to this ante-Celtic population of Ireland in the mythological genealogy of Fion, who is called the grandson of Basc (Fion Mac-Cumhail na *Baiscne*); although I do not know whether I shall weaken or strengthen it by mentioning that the word *Basc* itself is an old Irish synonym of the word Fion, signifying *red, fair*.

Oisin* (Ossian) and Taluesin† (Taliessin), being mere mythological concentrations and personifications of the poetical activity and influence of this tribe; the one, Ossian, as the representative of the bards who themselves belonged to it; and the other, Taluesin, as that of the bards of a neighbouring nation, who received from the Ua-sin the impulse of their art and inspiration.

II.

Grimm's Law Scale of Consonants extended to the Celtic.

A knowledge of modern Celtic is indispensable, in order to detect and appreciate, in many European languages, both ancient and modern, such of their heterogeneous elements as they acquired owing to their more or less intimate and lasting contact with the ancient Celtic.

It is not only in the different Teutonic languages that this infusion of Celtic elements is observable; we find them in the Latin also, into which they were introduced owing to the contact between the Romans and the Umbrians and Galli; and we find them to a con-

* The compound *Ua-sin* has been changed into "*Oisin*" by the regular process, peculiar to the Celtic, of a retrogressive assimilation of the vowels, the *u* accommodating itself to the following *a* by becoming *o*, and the *a* to the following *i*, by becoming *i* itself. A similar process of change has taken place as regards the word Tal-ue-sin, in which the *a* of *ua* has accommodated itself to the following *i* by becoming *e*.

† The *Tul*, which in the name *Tal-ue-sin* precedes the *ua*, is merely a repetition or explanation of this word, representing the word *Tul*, *tribe*, *family*, once common to both the great Celtic dialects, of which the Gaelic has still retained it; whereas the modern Welsh, retaining it only in the two derived words *Talaeth* and *Tulais*, has for its simple form and meaning substituted the word *Teulu*, which is still derived from the same root. The contact between the Cymry and Fena, to which the school of poetry personified in Taluesin owed its origin, does not, as far as I see, refer to the Fena of Ireland, but to a Fenish tribe which, on their way thither appears to have settled for some time on the western coast of this island, opposite the Isle of Man. There at least, as it seems to me, we must look for the *Ua-Ffin* mentioned by the Cynveirdd (*e. g.* Myv. i. p. 40, Yn Mor-dai *Ua-Ffin*), as well as for the land *Argoed*, of which the *Fyn*, celebrated amongst the twelve mythological heroes of the Gododin (v. 803, Myv. p. 12), is said to have been king.

siderable extent in Spanish and French, into which they came through the Latin, and in which they were retained through the conquerors of the Iberians and Aquitanians. It is true, however, that in the Teutonic languages the extent and influence of these Celtic elements is much more considerable than in any of the three just mentioned, which may be accounted for, by the fact of the Teutonic tribes having found a Celtic population already established in nearly all the countries which they conquered. In consequence of their intermixture with this population, they necessarily adopted a great number of terms, and even general modes of expression, connected with a civilization which, mainly owing to the influence of the Druidical discipline, was then superior to their own.

In undertaking, however, to separate these Celtic elements from the great genuine mass of any other language, we must take care not to claim as Celtic such words and grammatical rules as both languages possess in common, either in consequence of their being branches of the great Japhetic stock, or of the primitive unity of human speech in general. One of two characteristics is always requisite to enable us to pronounce with certainty that an element found in another language, which seems to be Celtic, is so really. These are, either an internal one, which consists in the incongruity or imperfect connexion of that element with the mass of the language; or an external one, consisting in the history of its introduction, which is capable of being traced.

With reference to the first of these two characteristics, the most unquestionable mark of the origin of very many Celtic words in English and German is the fact of their exhibiting, by the mode in which the *strength* (or *quantity*) and *form* of the one or several consonants (mutes) which they contain are combined, the scale of articulation which belongs to the Celtic and not to the Teutonic. I allude to the interesting fact, discovered by Jacob Grimm, that the Teutonic languages by a certain regular deviation from the phonetico-etymological system of the Sanskritic languages—a deviation best known in this country under the appellation of *Grimm's law*—adopted a scale of articulation of their own, which in one portion of the Teutonic dialects, the High German, underwent a second regular alteration. I think it necessary, however, to

correct one great error with respect to this law, one not less in substance than in name, by which the demonstration of the law referring to it has hitherto been obscured.* It consists in the indefinite and confused signification given to the terms *tenuis, media, aspirata.* Instead of denoting, as they do, not only as regards the nature of the substance, but also the definition given to them by Greek and Latin grammarians, the three different degrees of *strength* (*δύναμις*) or *quantity of air* with which *every* letter may be uttered, they are used by modern grammarians, the first and second (*tenuis* and *media*) to denote the difference between the *surd and vocal form* of the consonant, and the third (*aspirata*) its alliance with a guttural sound. This is done merely because in Greek and Latin, according to the scale of articulation adopted by these two languages, the *tenuis*, i. e. the feeble or short consonant, is, when a mute, generally *surd*, the *media*, i. e. the consonant of middle strength or quantity of air, generally *vocal;* and the *aspirata*, i. e. the long or strong consonant, generally affected by a *guttural articulation.*† But a delicate ear will perceive at once that the English *th* in *thou*, and German *d* in *du*, are as much *tenues*, i. e. feeble, as the French *t* in *tu;* and in like manner, that in the word *deer*, German *thier*, Greek *θήρ*, the three mutes *d, th, θ*, are equally *aspiratæ*, i. e. strong, and that in the word *two*, French *deux*, German *zwei*, the three mutes, *t, d, z*, are equally *mediæ.*

Now, if we apply Grimm's law, thus corrected, to the Celtic languages, we shall find that they have retained, on the whole, the scale of articulation belonging to the classical languages, more particularly the Sanskrit scale, with which they agree in attaching the long quantity, not as the Greek and Latin do, to the surd form of the mute, but to the vocal. I shall likewise illustrate this fact, with reference to the English and German, by a table of comparative examples.

* The author of this paper, as far as he knows, was the first to discover this error. V. Münchner Gelehrte Anzeigen, 1841, No. 238, p. 877.

† The case is not so even in the Sanskrit, where surd mutes allied with *h* are generally tenues.

Articulations.	Sanskrit.	Greek and Latin.	Gothic and English.	High German, Ancient and Modern.	Celtic, Welsh and Irish.
Dental tenuis -	tan - -	τείν-ειν, ταν-υς; tend-ere, ten-us, ten-er	*G.* than-jan, thann-i; *E.* thin	*A.* den-jan, dünn-i; *M.* dünn	*W.* tyn-u, ten-yn; *I.* tan-aigh.
Dental media -	dant-a - -	ὀ-δοντ-; dent - -	*G.* tunth-u; *E.* tooth	*A.* zand (i. e. tsand); *M.* zahn	*W.* dant; *I.* dead.
Dental aspirate -	Dhā (Dhāt-ā, Dāt-ere God)	τί-θη-μι - - -	*E.* do - - - -	*A.* tuo-n; *M.* thu-n -	*W.* Da-i (Maker, Creator); *I.* do.
	madhu - -	μέθυ - - - -	*E.* mead - - -	*A.* meth - - -	*W.* medd; *I.* meadh.
Palatal tenuis -	- - - -	κέρ-ατ-; corn-ū -	*G.* haurn; *E.* horn -	*M.* horn - - -	*W.* corn.
Palatal media -	g'an - -	gen-ui - - -	*G.* kuni; *E.* kind -	*A.* khunn-i, khind (infans); *M.* kind	*W.* gen-i; *I.* gean.
	(han-u) - -	γέν-υς; gena - -	*G.* kinn-i; *E.* chin -	*A.* khinn-i; *M.* kinn	*W.* gen-au.
Palatal aspirate -	hans-a (instead of ghans-) -	χήν; [h]ans-er -	*G.* gans; *A.-S.* gos; *E.* goose	*A.* kans; *M.* gans -	*W.* gwydd; *I.* geadh.
		hœdus - - -	*G.* gait-ei; *E.* goat -	*A.* kaiss; *M.* gaiss	*W.* gid.
Labial tenuis -	pad-a - -	ποδ-; ped- - -	*G.* fot-u; *E.* foot -	*A.* vuoss; *M.* fuss -	*W.* ped (in pedawl, pedestr).
		πίτυρες - - -	*G.* fidwor; *E.* four -	*A.* vior; *M.* vier -	*W.* pedwar.
	ap-a - -	ἀπό - - - -	*E.* of -	*M.* ab -	*W.* ap (ab).
Labial media -	- - -	λείβ-ω; labium - -	*E.* lip -	*M.* lippe -	*W.* llyv-u, llav-ar.
Labial aspirate -	bandh (with metathesis of *h*)	πείθ-; fœd-us - -	*G.* bind-an; *E.* bind	*A.* pint-an; *M.* bind-en	*W.* bydd.
	bhū - -	φυ-; fu- - - -	*A.-S.* be-om; *E.* to be	*A.* pi-m; *M.* bi-n -	*W.* bu; *I.* bi.

We see from this table, that whenever the connexion between an English or German word and the corresponding Celtic is natural and organic, the mute or mutes which it contains, must differ in a certain regular way from those of the Celtic word, according to this scale:

DENTALS.

Celtic t (tenuis),	*English* th,	*High German* (Ancient and modern) d.	
„ d (media),	„ t,	„	ts. (z.)
„ d (aspirate),	„ d,	„	th.

PALATALS.

Celtic c (tenuis),	*English* h,	*German* h,
„ g (media),	„ k,	„ A. k. h; M. k.
„ g (aspirate),	„ g,	„ A. k; M. g.

LABIALS.

Celtic p (tenuis),	*English* f,	*German* A. v; M. f. b.
„ ll (media),	„ l,	„ l.
„ b (aspirate),	„ b,	„ A. p; M. b.

If, therefore, we find English and German words corresponding to others in the Celtic, without exhibiting these regular features of difference, we cannot be mistaken in concluding that their relation to the Celtic is not natural and organic, but one which has arisen through accident. As examples of this class of words in the two languages, I shall mention the following, several of which it will be seen were already introduced into the Gothic and Anglo-Saxon:

English.	*Anglo-Saxon.*	*German.*	*Gothic.*	*Celtic.* (Gaelic—Welsh—Irish.)
To take	Tac-an		Tek-an	*G.* tagh.
To tread	Tred-an	Tret-en	Trud-an	*W.* troed, *Ir.* troidh, (*pes*).
To toot		Tut-en		*W.* twt-ach.
Taper				*Ir.* tap-ar, *Sanskr.* tap.
Time	Tim-e			*W.* tym, tym-mor, *Ir.* time, *Lat.* tempus.
Tower	Törr	Thurm		*W.* twr, *Lat.* turris.
Care		Sich kehren	Kar-jan	*W.* car-u, *Ir.* car.

English.	*Anglo-Saxon.*	*German.*	*Gothic.*	*Celtic.* (Gaelic—Welsh—Irish.)
Car, cart		Karre		*W. Ir.* car, cart, *Lat.* currus.
Carp, carpet				*W.* carpi-aw, carp (vellus), *Ir.* cearb.
Cup		Küb-el		*W.* cwp-an, *Ir.* cup-a, κύπελλον, *Lat.* cup-a.
To choose	Ceosan	Kies-en	Kius-an	*W.* ceis-io, *Lat.* quæs-o.
To clepe	Cliopan	Kleff-en		*W.* clepio.
Pail				*W.* padell, *Ir.* padhal, *Lat.* patella.
Pear		Bir-ne		*W.* per-an, *Lat.* pirum.

III.

Law of Transmutation of Initial Consonants.

The effect produced upon the Teutonic languages by their contact with the Celtic is not limited to the introduction of a certain number of words. It extends likewise over a portion of the general grammatical rules in the etymological and syntactical, as well as the phonic department. I think I have detected, both in English and German, such general Celtic influences; but I shall confine myself here to the consideration of one of them belonging to the phonic department, which is no other than that very *change of articulation* alluded to above. This change seems to result from the adoption by the Teutonic of a peculiarity of the Celtic, which, owing to the primitive innate difference in the character of the two nations and languages, could not be adopted without producing a complete systematic revolution in the phonic department of the Teutonic. The peculiarity of the Celtic, here alluded to, is that curious law of *transmutation of the initial consonants* by which that language is distinguished from all others. As no correct explanation of this law has yet been given in any of the Welsh and Irish grammars extant*, I shall offer one here in as brief and succinct a manner

* Such an explanation was first indicated by Bopp in his paper Ueber die

as possible. Whenever a Celtic word which begins with one of the mutes — or certain semi-vowels even — happens to be, either from composition or syntax, preceded by, and at the same time grammatically connected with, another word which at present or formerly ended with a vowel or the semi-vowel *n*, the initial consonant of the word so preceded and connected must accommodate itself, by a systematic change, either in *form* or *shape*, of its own articulation, to that of the vowel or semi-vowel which preceded it. This must be done in such a manner that, after a *vowel*, the mute shall become either, under the influence of the guttural flatus inherent in all vowels, an aspirate (in the common English sense of the word*), or, under the influence of their vocal power, vocal when it is surd, and a semi-vowel when already vocal; and, in like manner, after the *semi-vowel n*, the mute, either influenced by its nasal articulation, shall assume a nasal sound, or, influenced by its vocal power, turn from surd into vocal —

For instance:

Amplified by the prefix *a* —

The *Welsh trev* (*house, village*) becomes *a-threv.*

The *Irish tan* (*fire*) becomes *a-than.*

The *W. tail* (*house*) becomes *a-dail.*

The *I. bra* (*brow*) becomes *a-bhra* (ὀφρύς).

Affected with the negative particle *di* —

The *W. barn* (*judgment*) becomes *di-varn, void of judgment.*

The *I. gair* (*word*) becomes *di-ghair* (*speechless*).

The *W. marw* (*dead*) becomes *di-varw* (*immortal*).

Combined with the word *og* (*young*)—

The *I. bean* (*woman*) becomes *og-bhean* (instead of *og-a-bhean*), *young woman, virgo.*

Celtischen Sprachen (1838), and more fully developed by the author of this Essay in his review of the works of Bopp and Pictet, in the Wiener Jahrbücher, 1844, June and July; to which we would refer the learned reader for this portion of our argument as well as for the remainder.

* Not in the sense of the Greek word δασεῖα (strong, long).

With *mawr, mor* (*great*)—

The *W. clōd* (*glory*) becomes *mawr-glod* (instead of *mawr-a-glod*).

The *I. clu* becomes *mor-chlu.*

Determined by the feminine article *an* (instead of *an a*), in *Irish*, and *y, yr* (instead of *yr-i*), in *Welsh*—

The *I. bean* becomes *an bhean.*

The *W. ben-w* becomes *y venw.*

The *W. per-an* (*pear*) becomes *y beran.*

The *I. peir-e* becomes *an pheire.*

Preceded by the indefinite auxiliary verb *a* in *Welsh*, *do* in *Irish*—

The verb *can* (*canere*) makes in *W. mi a ganav;* in *I.* (*do*) *chanaim* (*cano*).

Affected with the negative particle *an*—

The *W.* words *car* (*friend*), *pech* (*sin*) become *an-nghar, am-mhech;*

and with the transitive particle *cy* (instead of *cyn*)

The *W. tes* (*heat*) makes *cy-nhesu* (*to heat*).

Preceded by the numeral *five, W. pump, I. cuig*, between which and the following noun the genitive preposition *n* is understood, the Welsh words *blynedd, diwrnod* (*year, day*), and the corresponding Irish *bliadhna, de,* become respectively *mlynedd, niwrnod* (*pump niwrnod* instead of *pump-n-diwrnod*), and *mbliadhna, nde* (cuig n de): and preceded by the Irish article genitive plural *na* after which the same genitive preposition *n* is understood, the Irish words *treas, cailleach, pearsa, fear,* become respectively *dreas, gailleach, bearsan, bear* (*na bear* virorum, instead of *na-n bfear*).

The assuming of the guttural aspiration on the part of the consonant under the influence of the preceding vowel is the kind of change regularly adopted in Irish, whereas in Welsh the vocalization of the mute is now the general rule. It is unquestionable, however, from the gradual and even now only partial adoption of this rule in Welsh, that the Irish usage is the more ancient of the two, as is still further proved by its striking analogy with that of the *Dagesh lene* in Hebrew, which may serve to corroborate

the view founded in the physiology of sounds, that all mutes were primitively allied with guttural aspirations, and consequently, when they return to that alliance, only recover their full original power. With regard to the two kinds of change admissible after *n*, that resulting from the nasal power of the semi-vowel has been adopted in all cases by the Welsh; by the Irish only when the initial is a vocal mute; whereas, when it is a surd in Irish, it becomes affected by the vocal power of *n*. The following table will exhibit a comparative view of the different changes of the initial both in Welsh and Irish:—

RADICAL SOUNDS -	t	c	p	d	g	b	m	*I.* f	*I.* s	*W.* gw	*W.* ll	*W.* rh
ALTERED SOUNDS:—												
After a vowel:												
By aspiration -	th	ch	ph	*I.* dh *W.* dd	*I.* gh *W.**	*I.* bh *W.* v	*I.* mh *W.* v	fh	sh, ts	w	l	r
By vocalization -	*W.* d	g	b									
After N.:												
By vocalization -	*I.* d (dt)	*I.* g (gc)	*I.* b (bp)					*I.* b (bf)				
By taking the nasal sound - - -	*W.* nh	*W.* ngh	*W.* mh	*W.* n *I.* nd	ng	*W.* m *I.* mb						

The whole of the changes of initials effected by *n*, is in the Irish grammars known by the name of *eclipsis*, which refers more particularly to the way in which the transmutation is written in that language, namely, by placing the sign of the altered articulation before that of the radical one, which thus seems *eclipsed* by the former: for instance, na gcailleach, bpearsan, bfear.

The eclipsis is especially interesting, on account of the leading place which it takes in the system of Irish declension, its primitive case there being the old Celtic preposition *n*, denoting the genitive; and in Irish more particularly the genitive plural, which case, together with the nominative singular of the feminine gender, marked by the influence of the (suppressed) feminine ending *a* or *i*, is made, by an ingenious method of combined expression for the differences at once of gender, number, and case, to determine

* Apocope of a vocal *h*, into which *g* had been transformed.

the entire system (vide examples mentioned above). The suppression of the feminine vowel and the genitive *n* in the Irish declension, as well as the general suppression, both in Welsh and Irish, of the vowels and the semi-vowel *n*, nearly in all cases of syntax where the transmutation of the initial consonant takes place, I consider, so far from being a defect in the whole system, rather one of its particular beauties, inasmuch as, by distinctly showing the cause in the effect, it tends to husband the resources of the language, while it adds to its energy, and to carry the whole system of transmutation, the principle of which consists in a harmonious accordance of phonic and etymological distinctions, to the highest degree of perfection. The only phenomenon in universal grammar, known to me, to which this system, in all its magical expressiveness can be compared is the similar one of change of vowels in the so-called *strong conjugation* in the Teutonic languages, the principle of which is to be found likewise in the suppression of a termination which nevertheless is preserved, and as it were reflected, by the altered articulation of the inherent vowel of the root.

The Celtic system of transmuted initials and suppressed suffixes is, however, subject to one inconvenience; namely, that by tending perhaps towards a too intimate coalescence of the phonic and logical powers of speech, it may be more likely than any method of syntactical expression to obscure in the mind of the nation the consciousness of those grammatical distinctions to which it owes its origin. That such has been the case is evident from all the Welsh and Irish grammars extant; and how then can we wonder at the misapplication given to this system by the Teutonic tribes? The manner in which I think such a misapplication on their part gave rise to their altered scale of articulation is this :—

Those combinations of *power*, *quantity*, and *form* in the mute deviating from the radical scale, which in Celtic are but of syntactical import, and of occasional, although, of course, most frequent occurrence, were adopted as radical and permanent by the Teutonic tribes, who took the tenuis in its altered form as the basis of a new scale of articulation, radically different from the Sanskritic, which they had till then retained. This explanation accounts also, as will be easily seen, for the second alteration which the new scale

underwent in High German, the latter taking for a basis the *vocal tenuis;* whereas the Gothic had taken the *aspirate,* which as we have observed, must be considered the more ancient of the two forms of alteration. The Gothic, having adopted the *th* (þ*) as the short or feeble, and retained the *d* as the long or strong dental mute, came to adopt the *t* as the middle (*dental media*); whereas the Old High German, having made the *d* its short dental mute and tending to follow out this new change by a complete deviation from the Gothic scale, took the *th* or *t* as the long, and the *z* (*ts*) as the middle mute. And perhaps this is not the only instance in which the Teutonic mind has been misled into bestowing an absolute, instead of a relative, value on principles derived from the Celtic nation.

IV.

The Non-Sanskritic Element in the Celtic, and the place of Celtic in the Japhetic Languages.

One of the grandest results of modern comparative philology has been to show, that all languages belonging to one stock—and we may even say, enlarging this view, all languages of the earth — are but scattered indications of that primitive state of human intellect, and more particularly of the imitative faculty, under the highest excitement of poetical inspiration, in which the language originated, and with which every language remains connected, as well through the physiological unity of the human race, as through the historical unity of the family to which it more especially belongs. Of the divine art by which man in that happy primitive state of intellectual activity was enabled to understand the world and himself by means of imitative movements of his voice, and, at the same time, of the sacred treasure of ideas thus embodied in sound with which he then became entrusted, a certain portion only has been preserved and developed

* The peculiar sound of the Gothic (and English) þ does not form an objection to this fact, since this sound is but the result of a local coalescence of the *t* with the guttural flatus, the latter having accommodated itself to the former by becoming dental. It is by a similar process that *ph* and *kh* coalesce and pass respectively into *f* (φ) and *ch* (χ).

by each family of the human race, in accordance with its peculiar character and history, its virtues and defects. The most beautiful portion is undoubtedly that which has fallen to the lot of the Japhetic family; but this again has been divided amongst several nations, each of which possesses but one dialect of the great Japhetic language, and this but fragmentary and imperfect; and, in many of its parts not intelligible without a comparison of the sister dialects.

In consequence of the works of Dr. Prichard and M. Pictet*, the Celtic has, since the appearance of Bopp's Comparative Grammar, been acknowledged as the eighth of these sister languages, the other seven being the Sanskrit, Old Persian, Greek, Latin, Lithuanian, Sclavonic, and Teutonic. The entire circle of these languages, and thereby the comparative understanding of each of them, seems thus completed. Traces of the new light which has been thrown upon this family by the acknowledgment of the Celtic as one of the Indo-Teutonic dialects may already be perceived in several works of modern philology, particularly in the last edition of Bopp's Dictionary. One great prejudice, however, seems still to be clinging to the school to which we owe the scientific demonstration of the affinity of the Celtic with the Sanskrit — intimately connected, perhaps, with that very accuracy and soundness in its method of investigation for which we admire it — which has hitherto prevented that demonstration from yielding all the immense advantages which science had reason to expect from it. I mean, that the writers of this school are, as it were, chained down to regard the Sanskrit both as the historical and philosophical *ne plus ultra* of the comparative grammar of the Japhetic dialects, and have, by an exclusive system of minute references to this "Indo-Teutonic mother-tongue," as they call it, lost sight of any stage of human speech independent of, and perhaps anterior to, the Sanskrit, which may be involved in one of its sister dialects. In examining the Celtic, Pictet and Bopp easily discovered that this language, while in one portion of its grammatical usages it exhibits a systematic affinity with the Sanskrit, in another, exhibits an evident estrangement from it. But Pictet, instead of beginning his

* De l'Affinité des Langues Celtiques avec le Sanskrit. Par Adolphe Pictet. Mémoire couronné par l'Institut. Paris, 1837.

analysis with a comparison of these two portions, which he would thus have found to form one inseparable living whole, limited himself to the analysis of the Sanskritic portion, putting aside the other as a mere secondary admixture, the result, as he supposed, of accidental contact with one of the non-Japhetic languages; and, by so doing, he placed himself in a position that could not but lead to a misinterpretation of many features of even the Sanskritic portion. Bopp, on his part, though he did enter on the analysis of the non-Sanskritic portion, yet having confined his view to some isolated features — particularly the Irish declension — and having examined even these only under the influence of his Sanskritic prepossessions, detected in them nothing but mutilated and degenerated forms of his favourite tongue; whereas, he might have seen that the Sanskrit, in several of these very features which he analysed, exhibits, if not mutilated forms, at least the *caput mortuum* of a Celtic element.

Of the leading features in which the Celtic differs from the Sanskrit, we have already mentioned one belonging to the phonic department; namely, the transmutations of initials: another, belonging to the same department, is the *transmutation of vowels.* It is regulated by laws similar to, but much more fully developed than, those which determine the transmutation of primary and secondary vowels (*Umklang* and *Abklang*, or, with Grimm, *Umlaut* and *Ablaut*) in the Teutonic.

The moral principle of language in which originate both these features, may be said to consist in *flexibility* and *elasticity.* And if I were to designate in the same way the principle of most of the leading non-Sanskritic features in the etymological department, I should call it *analytical distinctness:* flexibility, elasticity, analytical distinctness—and are not these the qualities which most nearly represent the character of the whole Celtic nation? But the idea I have touched upon in the phrase *analytical distinctness*, requires some farther explanation.

When we compare our modern European languages, the English and French for instance, with the ancient, especially the Latin and Greek, we are struck by one marked difference in their grammatical characters; namely, the different manner in which they express *relative* or *incidental* notions or ideas. By the term *relative*

or *incidental* we designate and distinguish from the other great class of notions, which we call *substantive*, all those notions or ideas which, at the same time that they exclusively represent phenomena of a certain general and categorical meaning, represent moreover each of them, not with reference to itself, but only to two or several other phenomena which, of course, always belong to the class of *substantive* notions. For instance, in the sentence, *the horse is struck by a spear — equus tangitur telo*, the three substantive notions of which, as of its substantial elements, the proposition is composed, are expressed by the words *horse, struck, spear;* whereas the four particles *the, is, by, a*, express the relative or incidental notions of the sentence, which evidently does not receive from them the addition of any new independent element, but merely the connexion and determination of the three above mentioned. And the equivalent Latin sentence which I have mentioned will at once have directed the attention of my readers to the nature of the difference which we have stated to exist between ancient and modern languages, in expressing relative or incidental notions. The notions in the above sentence belonging to that class are in English rendered by four separate and auxiliary words placed beside the principal; whereas in Latin they are rendered through the *inflexion*, as it is generally called, of the latter. But what is *inflexion?* It is a system of etymological combinations, by which any one of those elementary parts of imitative articulation which (by a metaphorical term referring to the analogy existing between the development of plants and words) are usually called *roots*, and more especially any one of those *roots* which express *substantive* ideas, and which for this reason we may call *substantive roots*, becomes, in connected speech, regularly allied with one or several of another class of roots which differ from the former, both in form and meaning, the one being generally slighter than that of substantive roots, and consisting not, as most of those, in a double, but in a simple articulation, the other (the meaning) being always that of an incidental or relative idea. The place occupied by the *incidental root* may be either before or after the substantive root: in the former case it is called *prefix*, and in the latter, which is by far the more general, *suffix*. And having thus defined the term inflexion — which in a more appropriate sense refers parti-

cularly to the mode of interchange which takes place between several incidental roots as becoming alternately attached to one substantive root — we may say that the great difference alluded to, between ancient and modern languages, consists in the former expressing incidental notions by *auxiliary words*, and the latter by *auxiliary roots:* for instance, in the example above given, the notions expressed in English by the words *the, is, by, a,* are expressed in Latin respectively by the three suffixes (one of them double) *us, it-ur, o.*

The comparative advantages and disadvantages of these two methods may be easily understood. The one, uniting the incidental with the substantive notion under the same emission and intonation of voice, and blending both, for the mind as well as the ear and the eye, into one organized whole, composed, as it were, both of an etymological and a phonic *arsis* and *thesis*, is more fit to exercise the synthetic and artistic capabilities of the human intellect. It moreover favours the development of the intellect, by perfecting what may be called the *objective* beauty of language; inasmuch as, through the varying union of a series of suffixes with one unchanging root, it endues the process of inflexion with the appearance of vital activity. The other method, which gives distinct breath and accent to each incidental notion, and so both to the corporeal and intellectual eye is constantly renewing that difficult process of the understanding, through which the primitive root (which always involved a full sentence) has decomposed itself into its logical elements, is better calculated for the exercise of the analytical and discriminating powers of the intellect. Besides, as it prevents the meaning even of the slightest imitative sound from being obscured, it serves to quicken the consciousness of each minute member of the sentence, and thus to augment the *subjective force* of the language.

And now which of these two methods is the more ancient? In the Teutonic languages it is certain that the analytical tendency which now predominates in their etymological department, is not the primitive one; inasmuch as it is not found in their most ancient dialect, the Gothic, which has nearly all the synthetic habits of the Sanskrit and the Latin: and hence, in every language in which the analytical method of declension and conjugation has been observed, it has

been suspected by modern philology to be the effect of decomposition. But the case is different with the Celtic, which by its entire structure, as well as by its history, lays claim to a much higher antiquity than the Teutonic, and reaches back to an earlier epoch in the history of human speech: an epoch anterior, as we may infer from philosophical considerations, to that of the synthetic principle represented by the Sanskrit, and during which the analytical principle must have prevailed.

This conclusion is fully borne out, and confirmed as a fact, by one of the greatest discoveries of modern philology, that of the Old Egyptian. This language, at the same time that it shows in a considerable portion of its grammatical features — especially the formation of roots, the choice and specification of their meaning, and the system of conjugation — a decided primitive affinity to the Sanskrit, in another manifests an almost total absence of the observances of etymological synthesis, so systematically carried out by the younger language, thus proving that the decomposition which has taken place in the Teutonic languages, with reference to the Sanskrit, is, with reference to the more ancient mother-tongue, only a kind of return to their original state. And I have no doubt that this return has been effected, not more by their instinctive tendency to recover the lost perception of the meaning of most of the incidental roots, than by the influence of the Celtic, which in all its non-Sanskritic features most strikingly corresponds with the Old Egyptian.

This correspondence refers, first, to a considerable number of specified roots and words, which, as far as I am aware, belong exclusively to those two languages: *e. g.* —

Eg. rā, *sun.*	*Ir.* lā, *day.*
aah, *moon.*	eagh, *moon.*
siw, *star.*	*W.* syw, *bright, clean.* sew-yd, *stars.* syw-ed, *astronomy.*
val, *eye.*	gwel-ed, *to see.*
mas, *to suckle, young, child.*	*Ir.* meas, *child; W.* moes, *suckling nursing, education* (coll. *Lat.* mos).
rar, *child.*	ail, *child.* (*W.* eil, God. 762.)
man, *to go.*	*W.* myn-ed.

Eg. man, *rock, stone.*	*W.* maen; *Ir.* main (coll. *Lat.* mœnia: *Hebr.* e-ben).
ev, *to be thirsty.*	yv-ed, *to drink* (coll. *Lat.* eb-r-ius).
neb, *every one.*	neb. *whatever.*
neb, *lord.*	nev (God. 151), nav, *lord.*
ma, *place.*	ma, *place.*

Secondly, to several incidental roots of great import in the etymological department: *e. g.* —

3 pers. masc. *Eg.* ef, o; *W.* ev, o.

3 pers. suffix. *Eg.* f (ai-f, *he goes*); *W.* f (ai-ff).

2 pers. masc. singular and plural. *Eg.* k (ai-k, *thou goest*); *W.* ch (ae-ch, *you were going*); el-och, *thou didst go.*

Indefinite auxiliary verb. *Eg.* ar, au (ar ai-f); *W.* yr, a (yrai-ff).

Thirdly, to the system of combining, in the form of suffixes, the personal pronouns with the prepositions; a usage similar to that which prevails in the Hebrew, where personal pronouns are suffixed to substantive nouns, but which is more remarkable in a linguistic point of view, inasmuch as it implies the consciousness of the primitive meaning of prepositions, which was always that of substantive nouns: *e. g.* —

Eg. (a)r-of, ar-o, *towards him.*	*W.* ar-n-o (*n* is the genitive preposition), *upon him.*
(a)r-ok; *towards thee.*	er-och, *towards you.*
(a)n-ok, *about thee.*	am-dan-och, *about you.*
hra-k, *before thy face, before thee.*	rhag-och, *before you.*

Fourthly and principally, it refers to the expressing of incidental notions by roots, in the character of separate and independent words, which are used in Sanskrit to express the same notions, but as suffixes and prefixes, and in a much more limited signification. Thus, in the conjugation of the verb, the three persons, which the Sanskrit regularly expresses by the personal pronouns combined, under the form of suffixes, with the verbal root, are expressed in Celtic sometimes in the same way, but in other cases by the same pronominal roots under the form of separate auxiliary words, which may be

placed indifferently either before or after the verbal root: a flexibility of expression; to which the Egyptian supplies a parallel, the use of the pronoun, as *suffix*, belonging to the *sacred*, and as *prefix* to the *demotic* (popular), dialect of this language: *e. g.* —

Eg. sacred dialect, *ai-f, ai-k, ai-a* (it, is, eo).
demotic dialect, *ef-ai, ek-ai, ei-ai.*
W. can-a-vi (Godod. 612) or *can-a-v* (*canam*).
cen-i-t(i) (canes); *can-o* (cecinerit).
can-er vi, ti, evo (canor, caneris, canitur).
canu yr wyv (canere sum) alternating with *can-wyv* (cano).
Ir. can-aim (cano); *can-t-ar me* (canor).

Thus the Welsh indefinite auxiliary verb *a, to go, to be*, which, even as the corresponding Egyptian *au* (Coptic o), is placed before substantive verbs (verba concreta) to mark the indefinite mood, appears in Sanskrit and Greek as the well-known *augment: e. g.* — *Welsh*, a ddysgodd, *he did teach*; *Sansk.* a-diks'-a-ta; ἐδίδαξε.*

And thus also, to mention an instance which I have already alluded to, the word *n*, which, alternating with *m* (and undoubtedly identical with the word *m, ma*, place), serves in Egyptian as a preposition to denote all cases, though particularly the genitive, serves in Celtic (where it is generally contained, as we have seen, in the transmutation of the initial) to denote exclusively the genitive, and more particularly the genitive plural, to which in Sanskrit, Greek, and Latin, it has been regularly limited: *e. g.*—

Egypt.: nef *n* anach, *breath of life;* sont *n* ataf, *avenger of his father;* fitw m ah-aya, *four of oxen.*
Welsh: Caer-n-arvon, *town of Arvon;* ar-n-av (*vide supra*), saith niwrnod (instead of "saith *n* diwrnod," *septem dierum*).
Irish: iar, *n*-dilinn, *after the deluge* (originally *in the back, west, of the deluge*), na-n-dia (pronounced na-n-ia), *of the days.*

* The author of this Essay was the first, as far as he knows, to indicate this origin of the augment, in an article on two ancient Italian inscriptions, inserted in the Münchner Gelehrte Anzeigen, April, 1843, and afterwards in the Wiener Jahrbücher.

Sansk.: diu-n-am.

Lat.: die-r-um (coll. *Old High Ger.* kep-ôn-o; *A.-Sax.* giv-en-a, *of the gifts*).

Now, weighing all these affinities of the Celtic with the Egyptian on the one side, and the Sanskrit on the other, I believe we may be justified in saying that it occupies a place in history between them both, and marks an intermediate stage in the development of human language, and more especially of the Japhetic, between the analytical fluidity of its genial infancy and that beautiful synthetic consistence, so to speak, of its vigorous maturity, as we find it represented in the Sanskrit.

The intermediate position which we have assigned to the Celtic, with respect to the different epochs of the Japhetic languages, it still holds, as regards the relation of this family with the Semitic and Finish, both of which participate in many of its non-Sanskritic features. It appears to be also by this internal relationship, much more than by external contact, that we must explain the resemblance of many Celtic elements with those of two languages, both of which seem to belong to a Celto-Finish branch, I mean the Basque and Etruscan.*

* As regards the advantage which may be derived from the Celtic for the elucidation of the Etruscan, see the article last quoted in the Münchner Gelehrte Anzeigen.

SIXTH CHAPTER.

THE LAST RESULTS OF THE RESEARCHES RESPECTING THE RELATIVE POSITION OF THE SEMITIC LANGUAGES AMONG THEMSELVES, AND TOWARDS THE INDO-GERMANIC FAMILY.

Historical Introduction.

THE ruling critical Iranian school, reducing everything to, and deducing everything from, Sanskrit, turned a deaf ear to all questions, as to further affinities, even after the old Egyptian language had become accessible to every scholar. The heads of the critical Hebrew school, Gesenius and Ewald, had thrown out a hint that, by the reduction of the triliteral Hebrew roots to biliteral ones (proposed already in the seventeenth century), we might find strong reason to suspect a radical affinity between Hebrew and Sanskrit. Klaproth had pronounced, without reserve, that it was so, and attempted a proof in the rarest of all linguistic books (1828).* Ewald, without controverting the assertion, observed, with his usual acuteness, that such etymologies must go back beyond the historical age of Semitic forms; an observation in which Humboldt concurs †, but which evidently does not settle the question. It was only in 1838 and 1840 that two masters of the Hebrew tongue, Fürst of Leipzig (himself a Jew), and more especially Delitzsch of Halle, endeavoured to break down the wall of partition. Delitzsch accepts entirely the rules laid down, and the method observed, by Indo-Germanic scholars: and rejects as

* Observations sur les Racines des Langues Sémitiques: quoted by Humboldt. See the following note.

† P. ccccxi. and foll. Compare Ewald, Lehrb. § 4.

strongly as they the former irregular and unscientific method of etymological comparisons; but he maintains and exemplifies the constant and undeniable analogy between Indo-Germanic and Semitic roots, and thus fully establishes the claims to a further investigation upon a more extended plan.

Rödiger, the successor of Gesenius at Halle, arrived at similar conclusions by his own researches concerning the most ancient Arabic forms. Perhaps he or Delitzsch would even have been led to the establishment of a new and higher principle of investigation, if the great facts which Egyptian philology at that period had already revealed, by Champollion's grammar, to those who were willing to learn, had not been so strangely overlooked by all German scholars. Egypt is the connecting link between them; and the method of investigation, which the peculiar nature of the Egyptian language demands in order to be understood, cannot but be intimately connected with that which seems requisite to establish the historical connexion between the Semitic and Japhetic languages, by a new and more profound investigation of their differences as well as of their similarity. The rigid Indo-Germanic school has assumed, but never even attempted to prove, that we must reject all evidences of historical affinity which do not rest upon the identity of inflexions and formative words. Now we agree with that school in maintaining, that analogies in the musical element of language (if we may so call whatever belongs to the peculiarities of intonation, and the greater or less prevalence of one or the other class of sounds) are in themselves as inconclusive reasons for establishing a connexion in kind, as the varieties of colour, the form of leaves, smell, and similar properties are for constituting different species among plants, or as analogies in the colour of hair or of feathers for denying the identity of species among animals. But I can see no ground for the assumption that, where identity or affinity is wanting in the grammatical forms and their expression, there can be no radical affinity of

languages. For it is on this narrow principle that those isolating systems are designedly or unconsciously founded. Now we ask (anticipating what we hope soon fully to establish), what are (according to their own assumption or admission) the syllables or words of inflexions but remnants of some of the substantial roots or words (nouns and verbs), once taken out of the then common stock of integral words, and by a conventional act stamped to be pronouns, prepositions, or other particles, which gradually dwindled into inflexional forms? We ask further, this being the case, is it not on the contrary probable, that, as some families are allied both by decayed and living roots, others may be allied by living ones only? The formation of roots must certainly precede their decay. Ought not, therefore, an agreement in the roots of nouns and verbs to be as good evidence of a more remote, but still historical connexion and consanguinity, as the agreement in inflexions is allowed to be for the nearest relation between them? Languages related by identity of forms (viz. by roots, once consecrated for grammatical purposes and then decayed) must have in common the living roots, which are anterior to forms. There can be no identity of grammaticized and therefore defunct roots, without a historical connexion between the same languages in verbs and nouns and their derivatives. But a general affinity in the roots proves a common origin and a common history anterior to that point in the development of a language at which the grammatical forms took their origin; therefore, a more remote one.

We fully accept the principle as demonstrated and incontestable, that a near affinity between languages is impossible without an identity of structure in the inflexions and the formative words or syllables in general. We feel grateful to those who, by a combination of research and philosophical study, have established a method of investigating this nearest affinity of families. But why, I must ask those scholars, why should we

despair of finding also a strictly scientific method for investigating a more remote affinity by a comparison of the roots of their substantial words? You have hitherto studied the natural history of the most grammatical (and therefore, I believe, youngest) languages: you have thus found a method for understanding the latest part in the formation, representing therefore, I suppose, the most recent period in the history of human speech. Of course this method will not carry you further; and that is the reason why you have always signally failed whenever you have attempted to classify languages beyond that narrow family-connexion. Your method proved insufficient when you attempted to establish an affinity between the Iranian stock and a formation anterior to that individual system of forms, as for instance the Basque language. Still we cannot proceed further in comparative philology, and consequently in ethnology, without investigating that problem. We must therefore ask two questions: why should there not be an affinity, where we find living, although not decayed, roots in common? and if there is, why should there not be found a method of establishing it?

The Method.

If there be an incontestable (although more remote) affinity traceable in languages beyond the inflexions and formative words, what then, it may be asked, is the method of such an investigation?

To this question no answer is supplied by the Indo-Germanic school, any more than by the Semitic disciples of the schools of Gesenius and Ewald. The last-mentioned eminent scholar has enunciated a profound principle, already adverted to, by asserting that the investigation of the undeniable affinity of Sanskritic and Hebrew roots cannot be carried on without going beyond these two languages. But ought they not to show traces of their gradual formation?* Some facts have been elicited by Delitzsch, but these establish no method of investigation.

* I certainly agree with Ewald, that Dr. E. Meyer has not succeeded in solving (in his "Hebräisches Wurzel-Wörterbuch," 1845) the great problem of reducing the triliteral Hebrew roots to biliteral. It is impossible not to do justice to the learning and acuteness of the young but aspiring author, himself of Ewald's school; but the principal part of this work (with which I was not acquainted at the time of delivering my Lecture) stands or falls with the fundamental assumption, that the third person masculine of the triliteral Hebrew perfect becomes triliteral by a reduplication analogous to the Sanskrit and Greek perfect. Dr. Charles Meyer's view of the case seems to me much nearer the truth. It is impossible to carry out Dr. E. Meyer's theory without giving up at once the idea of reduplication. As to his view of the Egyptian and its relation to the Hebrew, I confess my surprise at seeing a philologer of the German school, and a man of undoubted talent and learning, treat the Egyptian as an unorganic aggregate, and maintain that two languages, which are without any original connexion with each other, can have the pronouns in common, as he cannot deny the Egyptian and Hebrew have. I shall make no remark on his etymologies of Egyptian words, and his derivation of the names of the Egyptian gods and goddesses from Semitic divinities. They are far too arbitrary to require a critical examination. Other remarks of his show, that he sees clearly enough that the two languages must be most intimately connected. The grapes hang high, but they are not sour.

As already indicated above, the method so successfully followed by Bopp in the narrow family circle of the Indo-Germanic nations, cannot be applied to any further research. The inflexions and formative words in the other two families are precisely *not* the same as the Sanskritic: those of most or all of the remaining families of mankind still less so. Now is it not a logical error in itself, to attempt to prove the remote affinity of languages by the same method as that of the nearest of kin? Few philologers of the critical school will deny, that inflexions and formative particles are the remains of roots; therefore there was a time when those inflexions did not exist. That time, and the relation of languages before that epoch, cannot consequently be investigated without a methodical inquiry into the living roots and their formation. The further we proceed, the more will even the vestiges of the Sanskritic inflexions disappear.

It seems to me to result from this preliminary view of the nature of languages, that we must leave the strictly grammatical comparisons entirely out of the question, as soon as we extend our researches beyond the nearest degree of affinity; otherwise we shall necessarily fail, and contradict ourselves. We might as well try to base comparative anatomy upon principles exclusively deduced from the affinities and differences of the Mammalia, or to solve the Keplerian and Newtonian problems by addition and subtraction and the Euclidean theorems of plane geometry.

Lepsius, in his "Essay on the Numerals," and Dr. Charles Meyer, both in his review of Champollion and Lepsius' "Hieroglyphic Researches," in his criticism on Pictet's "Celtic Grammar," and now in the article which precedes this chapter, have practically rendered evident the insufficiency of the old system. They have established the fact beyond all doubt, that there exists an undeniable community of living roots between the two families. They have shown that in many instances the Egyptian

roots present the intermediate link between both, as well in words as in forms. Lepsius has proved this as to the Numerals, and Meyer has clearly indicated other identical roots.

I shall now endeavour to apply the method I have hitherto followed in my own linguistic investigations, first to the whole stock of the Semitic languages, including the Egyptian or Chamitic. My Semitic report will give a succinct, but, as far as possible, complete, account of the Babylonian discoveries of the last few years, which have added so largely to our knowledge of those remarkable languages of the Semitic family, and will likewise contain the elements and results of my Egyptian researches.

If the Indo-European languages exhibit undeniable proof of the gradual extension of these races from the eastern part of Central Asia, the Semitic tongues present no less striking evidence of their being derived from the western part of the primitive seat of mankind. The range of the Semitic branch is less extended than that of the Iranian, but it forms a more compact and not less interesting mass. The Semitic tribes never extended into Europe, except by temporary incursions; they have, however, not lost their ground in Asia, Armenia excepted, and have penetrated into Africa at various epochs, even in the historical times, in which assuredly no traces of Japhetic origin are discernible. It is a fact to which I can here only allude, but which can be philologically proved, that the Semitic formation forms the groundwork of African languages from the Mediterranean coast of Africa into the interior of that mysterious country, even beyond the equator, in an uninterrupted line.

If we ascribe any truth to the Hebrew records and to the Babylonian traditions, we must assume that the first starting-point of this family was that part of Armenia where Mount Ararat is situated. For there the cradle of their race is placed by those two traditions which certainly are independent of each other.

Indeed, the tenth chapter of Genesis presents to us three

emigrating tribes out of five as having all started from different parts of that mountainous region. Let us only cast a rapid glance over these genealogies, interpreting them as reasonable records, and therefore in a rational sense. Of the five sons of Shem, three are represented as being without issue, that is to say, three tribes did not leave the country where this family first made its appearance. They are the following:

The first, *Elam* (Ēilam), or the men of Susiana (Khusistan) east of Lower Babylon. The Babylonian language may, therefore, be called Elamitic.

The second, *Assur*, or the Assyrians (Kurdistan). This represents the language or dialect of Assyria proper, the Assyrian in its strict sense.

The fourth, *Lud*, or the people of Lydia (in Asia Minor), which country, as we know, began at the Halys. We have no linguistic records to be identified with Lud or Lydia.

The third and fifth branches alone form independent settlements: Arpakhshad and Aram.

Arpakhshad (the men of Arrapakhitis), after having gone in the person of Eber into Mesopotamia, pass in the person of Abraham into Palestine (Canaan). Joktan, the father of some very ancient Arabian tribes, according to their tradition (Kahtan), is also a son of Eber. The younger tribes are derived from Ishmael. Hebrew and Arabian are thus placed in very close connexion.

Aram (called in Greek, Syrians) extend in four geographically disconnected branches, but all emanating from that centre. One of these is entirely unknown, and the other three may be identified with a part of the Nedjid or Northern Arabia (Uz), with the Syrian plain under the Anti-Libanon, and with that part of Mesopotamia where Nisibis is situated. We have, therefore, no right to make Aramæan the general name for Semitic languages.

Now, as to Arpakhshad or Arrapakhitis, we know from Ptolemy that their country was situated between Armenia and

Assyria, on the southern slope of the Gordyæan mountains, overhanging Assyria. This, therefore, we may consider as one starting-point. As to the origin of Aram, we have the remarkable passage of Amos (ix. 7.): "Have not I brought up Israel out of the land of Egypt? and the Philistines from Kaphtor (Crete)? and the Aramæans (Syrians) from Kir?" Kir is almost universally allowed to denote the country through which the Kur or Kyros of the ancients flows, on the other side of those mountains, north of Armenia. The name of Armenia itself does not occur in the Hebrew Scriptures, but Minni, Ararat, and Togarmah are named as parts of that country, Armenia proper thus appearing to be Ar-Minni, the land of Minni. *Ar* is an ancient root for land, country, which we meet with in Egyptian as well as in Sanskrit. In Ar-pakh-schad it must be the first of three roots, and it is so probably in Aram=Ar-Am.

Now, as to Assur, Khurdistan is nothing but the southern continuation of that central point, and we can easily understand that their settlement was not considered as an emigration from the cradle of the once-united family. Lud is the westernmost branch; and evidently was early crossed by the extension of the chivalrous Japhetic tribes in Asia Minor. As to Elam (preserved in Elymaïs, eastward of Susiana, or the land of Babel, Babylonia proper, on both sides of the Lower Euphrates), this settlement certainly supposes an emigration, if our records are historical, as I believe. But the Babylonian traditions and the Egyptian language unite in proving, that such an emigration must have been an ante-diluvian, that is to say, an ante-Noachian one. Berosus says distinctly that the first civilization came from the Red Sea, which means the Persian Gulf; and nature has made that country the most fertile portion of the globe: Berosus says that here wheat was found growing wild. Its fertility must be general as soon as proper use is made of the water-courses with which it abounds. Its metropolis is represented in the Bible as the centre of the dispersion of mankind; and the native

kings of a Babylonian empire are by thousands of years anterior to those of an Assyrian-empire. The circumstance, therefore, of there being no record of an emigration of Elam, can scarcely be explained otherwise than by assuming that these emigrations were anterior to the Noachian period and to that great physical revolution in the northern part of Central Asia of which the later emigrations were the consequence.

It will, therefore, be necessary to consider the point of Lower Babylonia as the one pole of the original axis, and the mountains of the primordial seats, between the Black and Caspian Seas, as the other. Among these mountains those which bear a name derived from Chaldees or Babylonians (Khasdim in Hebrew), the Kardukhian, that is to say, the northern part of Kurdistan or the land of the Kurds, will indicate the more precise northern locality. Indeed, Chaldees are mentioned from the Caspian Sea down to the Persian Gulf, as D'Anville's map shows. As to the post-Noachian emigrations, those to Arabia are as likely to have started from the southern pole of this axis as from the northern. From the first they would tend to South Arabia, from the first they necessarily would lead to the Sinaïtic peninsula and to the Nedjid. The branching off into Asia Minor must have come self-evidently from the north. For Egypt the most natural bridge is Palestine, which supposes a stream coming from Syria and Upper Mesopotamia. The southern emigration would have had to cross over at Suez from Sinaitic Arabia.

Thus far an unprejudiced view of this portion of the genealogies contained in the tenth chapter of Genesis may lead us, but no further. We have a basis for our nomenclature, and hints as to the starting-points. The documents and records which are the languages themselves must be our guides for the rest. We, therefore, here leave tradition, reserving for another place a complete examination and historical restoration of that venerable record.

In anticipation of what, in the philosophical portion of our inquiry, we hope to establish as a general principle, flowing from a very simple and therefore universal law, we shall take it for granted that the substantial or particle-language is the most ancient possible, and that the relative position and succession of the other languages will have to be made dependent upon its degree of development. The less developed language will have branched off from the original stock at an earlier period than that which presents a higher degree of development. This forms the ascending line of development. When the language has arrived at its culminating point as to its forms, the descending line will begin, which is a gradual decay of those forms. The languages of the emigrating tribes, if we possess early documents, will show us the state of development of which they are as it were the deposit, and which decide the place they are to occupy in the general scale.

But in applying these principles beyond the succession of the great families of mankind, considerable difficulties arise. It is easy to show that the Celtic family precedes the Germanic, because its poverty of forms cannot be explained by supposing that it had lost those forms which the Sanskrit exhibits in their completeness. The Celtic never had the Sanskritic development. But when we come to arrange the succession of the branches of one and the same family, I am afraid none but the Germanic, in its uninterrupted series of fifteen centuries, affords sufficient documents for this purpose. Certainly, in the Semitic stock, we are only able to establish the succession of the principal branches of the family. As to the relative place of Hebrew and Arabic, I think that the arguments are preponderant for assuming that the Hebrew represents a later stage of development, and that the Arabic is the Sanskrit or Zend of all those branches of the Semitic family which are known to us by literary documents. The Arabic forms exhibit a harmonious system, of which we find some portions preserved in the Aramæan,

some in the Hebrew, and the Arabic distinguishes roots confounded in Hebrew. Thus words which in Arabic have Ain or Ghain, Zain or Dsal, appear in Hebrew only with Ain and Zain. But if we examine them impartially we find that their union in Hebrew is the result of a mere confusion of two originally distinct apperceptions. The analogy of other languages is, without exception, in favour of this assumption: organic distinction is older than inorganic unity. The Hebrew is, however, not the daughter of Arabic: it appears in its monuments, on the contrary, as the worn-off form of a collateral branch of the Arabic, just as Old High German presupposes, as mother, a branch collateral with Gothic and Old Norsk. In the same manner, the literary Aramæan (Syrian and Chaldee) cannot be considered as the daughter of Hebrew: the Chaldee of the book of Daniel, and of the Targum, succeeded Hebrew in Palestine, but was no more derived from it than modern High German, in the north of Germany, was from the Low or Saxon German spoken previously in those parts.

We shall, therefore, follow in our arrangement the infallible guide of facts drawn from the records and monuments of the several languages, reserving to ourselves at the end a retrospective glance over the traditional account of the connexion between the languages of Shem. It may then, perhaps, become more intelligible and instructive than it was to us before.

We shall thus have the following series:

A. *Chamitism*, or ante-historical Semitism: the Chamitic deposit in Egypt; its daughter, the Demotic Egyptian; and the Coptic, its end.

B. *The Chaldee:* first, the original Babylonian, or the ancient sacred language of Babylonia and mother of historical Semitism; secondly, the Chaldee of Babylonia and Mesopotamia, or the most ancient North Semitic stock; thirdly, its latest phasis, the Jewish and Christian

Chaldee in the language of the book of Daniel and the Targum, and in the Christian Chaldee or the Syrian (Aramæan).

C. *The Arabic*, or South Semitic stock, in its two branches: the Himyaric, with its Abyssinian deposit; and the language of Northern Arabia, with the Amalekite dialect of the Sinaïtic inscriptions.

D. *The Hebrew*, or the language of the Bible from the Mosaic records to the age of the Maccabees, with its dialect, the Canaanite language (Phœnician and Carthaginian). It forms the younger branch of the North Semitic stock.

We shall thus follow up each of these branches to its latest forms, showing their relative position by exhibiting the decisive facts of their organic structure as much as possible in a synoptical form.

A.

THE CHAMITIC DEPOSIT IN EGYPT.

THE facts I have collected in the first volume of my "Egypt" require only to be applied to the principles of comparative historical philology, in order to establish that the Egyptian language is a formation of primitive Western Asiatic life deposited in the valley of the Nile, prior, however, to the development of historical Semitism. The facts which prove this are mainly as follows:

1. The roots of the Egyptian language are, in the majority of cases, monosyllabic, and, on the whole, identical with the corresponding roots in Sanskrit and Hebrew. This is said advisedly. The proofs will be given in the proper place. German scholars might have discovered this long ago, had they been able to overcome their almost invincible hieroglyphico-phobia, which in many is nothing but a vis inertiæ, ill concealed by gratuitous doubts, and, what is worse, by the sneers of ignorance, assuming the airs of superior wisdom.

2. The grammatical forms have throughout analogous formations in both: the pronominal system is, however, preponderantly Semitic.

Absolute Personal Pronouns.

I.	Anuk (=an-uk) Nuk, Nek,	*Heb.* Anokhi (an-okh-i).
Thou.	Entek (=en-tek), *m.* Enta, *f.*	*Chald.* Antah (an-teh).
He.	Entuf.	*Heb.* Hu, (as suffix) V. — *Chald.* and *Heb.* Enhu, as suffix.
She.	Entus.	
We.	Anen.	„ Anàḥnu (compare *Aram.* Anān).
Ye.	Entuten.	„ Atem, *m.* Aten, *f.*
They.	Entesen.	„ Hem, *m.*
	Sen.	„ Hen, *f.*

Affixed Personal Pronouns (Gen. or Accus.).

Me.	A, U.	*Heb.* I (compare *Arab.* ána=an-a).
Thee.	eK, *m.*	„ Kha, *m.*
	eT, *f.*	„ Kh, *f.*

Affixed Personal Pronouns (Gen. or Accus.)

Him.	eF, U.	*Heb.* V (ô). *Chald.* and *Heb.* suffix, Enhu.	
	ⲥⲏ, seh	(compare *Heb.* relative, sha, she).	
		Sansk.	Sa (he).
		Babylon.	Sa (who).
Her.	eS.	*Heb.*	Ha, ah.
Us.	eN.	„	Nu.
You.	Ten.	„	Tem, *m.* Ten, *f.*
Them.	Sen.	„	Hem, *m.* Hen, *f.*

Demonstrative Pronouns.

Sing. *The, this.* *m.* Pen. *Aram.* (Talmud), (post-pos.), Pun, pon.
f. Ten.

Plur. *The, these.* Apu. General expression, Pa. Compare Hebr. *pô, poh*, here (which in Greek is expressed by a demonstrative, οὗτος).

Relative Pronoun.

Enti
Ent } For all genders and numbers.

Declension of Nouns.

Sign of Dual, Ti
Plural, U (*Arab.* ū, in stat. constr. instead of ūna. Compare Babylonian sign of Nominative Singular).

Adjectives form the dual in *ui.* The Semitic mode of forming the plural by an internal modification of sound (a sort of *umlaut*), is visible in so many Coptic nouns that we must suppose the germ of this formation to have existed also in the Old Egyptian pronunciation.

There exists no declension, and to a certain extent no exclusive class of substantives. Any particle with the suffix *u*, for instance, forms a substantive in the plural. *Hem* is a particle signifying *in:* hem-u (also, ahem-u) means, "those who are in," "the inhabitants" (men); hem-t (ahem-t), "the inhabitants" (fem.), "the population." Thus, t-ent-petra, "she who horses," "infantry." So also the Egyptian word for crocodile is nothing but em-sukh, "he from the egg." In short, we find constant proofs that the words in Egyptian only begin to become parts of speech out of simple particles, which are to be understood from their position as nouns, or verbs.

The genitive case is most frequently expressed by the particle *an* (*en*), a preposition denoting of, by, to. That same particle marks also the dative to, and ablative by, after a verb. This particle is evidently connected with the indefinite relative pronoun *enti* (he who, she who, they who), exactly as the *sa* of the Babylonians, and the *she* or *äsh* of the Phœnicians and Ephraimites, are connected with the relative pronouns. *Sa* is the Babylonian relative itself; *she, äsh,* is the same as *asher,* the well-known Hebrew relative. But the genitive case, or the status constructûs, of the Semites can also be expressed by single juxta-position: thus, for instance, in the expression of our superlative:

Usire, neter naa neter-u.
Osiris, deus magnus deorum (= maximus).

3. The Egyptian language, in forming a sentence, expresses the copula (the junction between subject and predicate), either, as the Semites do, by placing the personal pronoun of the third person between both; or, as the Iranian language, by a particle denoting the verb substantive.

Semitic Element in Egyptian.

The Copula is expressed by *pa* (demonst. pron.) between the subject and predicate. Thus in the passage of the Book of the Dead:

(My loaves) pa em seri . t ubskh.
they of flower white = are of white flower.

Iranian Element in Egyptian.

The Copula is expressed by a præpositive particle:

Ar, er, Au } Indeclinable. The Babylonian *ar*, to "be."
Un Conjugated as verb (Compare ὢν, ὄν ?).

The substantial meaning of the particle *un* is clear enough, not only in the Coptic, but still more in the ancient language, even in that of the Old Empire. In the monuments of this period its original pronunciation is *u.ⁿn*, which is exactly the Coptic *uôn*. Its original signification is, shining, to shine, light; hence, to appear (from which an hour of the day); thence, to open (to make appear). This idea of expressing the verb substantive through that which shines forth, which is manifest, is the same as the Greek expression, θεὸς φαίνεται ὢν ἀγαθός, "God is (manifestly) good."

The substantial meaning of *au* may likewise still be traced. *Au* means already in the language of the age of the Pyramids, a crook,

a crane, for lifting up. This is its original sense. It corresponds perfectly in sound to the Hebrew *vav*, which has exactly the same signification. Analogous to this is the use of *au*, in the sense of born of = the shoot of; and, curiously enough, *au*, as well as *vav*, signifies *and*. The connexion between the primitive substantial and the latter formal signification is not difficult to understand. The verb substantive unites or, as it were, hooks together the two substances into a sentence affirming or negativing their relation to each other. Thus does the connective particle; it hooks together two sentences. *And* (like German *und*) is connected with *end*, and denotes the abbreviated expression for a new sentence being added to what was said before.

Negation is expressed by the præpositive *en, nen;* post-positive *en, tem*, with the personal affixes following. The sound of *n* for negation is almost universal; even in Semitic the Hebrew *nû* or *hēnî, negare*, belongs to the same root.

In the *conjugation* of the concrete verb, the infinitive and all persons and numbers of indefinite tense are expressed by the simple root, *iri*, "to make."

I, thou, he, she
We, you, they } Make, made, are making, will make.

In short, the verbal root is a particle, stamped as a verb by its position, and, additionally, by the affixes.

The personal suffixes added to this root form the present tense.

I,	Iri . a.	Make, makest, makes, make.
Thou,	Iri . ek—et.	
He, she,	Iri . ef—es.	
We,	Iri . en.	
You,	Iri . ten.	
They.	Iri . sen.	

The *past tense* is formed by placing *en* between the root and the affix.

Iri . en . a(u),—"I have made."

En is the particle mediating between the verb and the pronoun.

The *future tense* is expressed by prefixing *au*, followed by an affix, and terminating with *er* (particle), meaning "towards." The sense therefore is, esse versus ("essere per," *Ital.*).

Au . a . r. iri = I shall make.
Esse ego versus facere. Sono per fare.

Abbreviated, au . a . iri.

It is neither accidental nor without meaning, that both in Egyptian and in Semitic the future tense is indicated by the position of the affix, as preceding the verbal root.

There is even the optative mood by prefixing *mai* (also *ma*), which particle means, in Old Egyptian, "to come." This is indicated very naïvely by the hieroglyphic of the optative *mai*, a man or woman raising the hand (inviting to come). The sense of *ma*, both in oldest Egyptian and in Hebrew, as place, is evidently connected with the other signification. Instances of optative:—

Mai pai ba.a
(Possis volare anima mea).

Mai . rem . i.
(Possim flere ego).

These are germs of Iranian conjugation, that is to say, of the modification of the copula, whereas the Semitic modifies the predicate. But the germs of the Semitic conjugation are not wanting. Every verb may be made a causative (like the Hebrew Hiphil) by prefixing *s*, which, in the analogy between Egyptian and Hebrew sounds, corresponds exactly with the Hebrew *h*, as the pronouns suffice to prove: the Aramaic has *s* and *sh*.

The *participle* is formed by adding the personal suffixes of the third person to the root (infinitive), or the particles *ta*, *et*.

Iri.f, *Iri.s*, } Faciens (masc. and fem.).
Stut.u (Copt. *eu-stôt*), trementes.

Ankh, to live:
Ank.ta, living (he).
Seneba.et, valens.

Verbs ending with a liquid form the participle by adding *iu*, *i*, to the root:—

Un, open: *Un.iu*, opening.

The passive participle is formed by adding *ut*. For instance:—

Aa, to pray: *aa.ut*, prayed to.

Thence passive conjugation, by adding the suffix:

aa.ut.ef, he is prayed to.

HISTORICAL RESULTS.

THE foregoing decisive linguistic facts, the nature and consequences of which will be fully developed in the last volume of "Egypt," suffice to prove the existence of an organic and primitive connexion between the Egyptian and that stage of Asiatic language in which the separation of the two great tribes, the western and the eastern, was not yet fully established. We may also confidently assert that this philological proof has a full correspondence in the connexion discernible between the primitive structure of Egyptian, Babylonian, and Phœnician mythology.

The following historical facts are the corollary of this discovery.

First. The Semitic and the Iranian families are primitively connected with each other.

Secondly. The emigration from Asia into Egypt is ante-Noachian. This explains also the fact of the Egyptians having no traditions respecting the Deluge; that is to say, the great catastrophe which changed the climate of that primitive abode of mankind, the land between the Caucasus and Ararat in the west, the Altai in the east, and the Paropamisus in the south. The Egyptian language is already stereotyped in the fourth dynasty, or about 3000 years before Christ, and must have been almost as much so when the era of Menes began, which means the epoch of the foundation of Egypt as one empire, about 500 years before our earliest contemporary monuments. This epoch itself is anything but the beginning of Egyptian life, which, on the contrary, had existed about 2000 years before Menes, organized already in districts (Nomes), and gradually merging into the division of the Upper and Lower country. This period, again, implies a long period during which the localization, and, as it were, the Africanizing, of that race took place.

Thirdly. The native name of Egypt is Khami, the black, from Kham. The historical meaning of Kham, therefore, is Egyptian. Khamitic is the first indistinct stage of Asiatic Semitism. This fact is symbolically represented by Kham, as Shem's elder brother, Japhet being the youngest of the three. Scripture calls Shem the elder brother of Japhet, but not of Kham. The expression that Canaan is the son of Kham must, therefore, be interpreted geo-

graphically. The departure of Canaan out of Lower Egypt, as part of the people of the Shepherd Kings, after a thousand years' sojourn in that country, which took place in historical times, and his return to the land named after him, may have frequently occurred before the reign of the Hyksos. Geographically then, and historically, it is true that Canaan was the son of Egypt: for the Canaanitic tribes which inhabited historical Canaan came from Egypt. In the same sense, Nimrod is called a Kushite, which means a man of the land of Kush. The Bible mentions but one Kush, Æthiopia: an Asiatic Kush exists only in the imagination of the interpreters, and is the child of their despair. Now, Nimrod was no more a Kushite by blood than Canaan was an Egyptian; but the Turanian (Transoxanian) tribe, represented by him, came as a devastating people, which had previously conquered that part of Africa, back into Asia, and there established the first great empire. In every period of the world there has been a flux and reflux of nations between Egypt on the one side, and Arabia and Palestine on the other. Why should such a geographical origin not be expressed geographically, and why should it be misinterpreted?

Fourthly. This emigration came from Western Asia, but whether from the northern or southern pole of our axis is uncertain. Much may be said in favour of the supposition that it came from the north, by Syria and Palestine, and thence spread over the valley of the Nile as far as Syene—and not further; for Egypt terminates here, and Egypt (Kham) is identical with the Egyptian (Khamitic) language. There is a flux and reflux observable from the Lower into the Upper, and from the Upper into the Lower country; historical Thebes is younger than Memphis, but Memphis was built by a powerful and civilized prince of Abydos in Upper Egypt. If the stream came from Lower Babylonia, it must have entered through Sinaïtic Arabia, and the settlers may have easily passed into Egypt by Suez, as before observed, without crossing at the Gulf, or opposite to Kosseyr. The exploded notion as to an original connexion between India (the youngest child of Asia) and Egypt (the deposit of primitive undivided Asia) is as groundless as it is absurd, and no longer requires refutation in the present state of historical investigation. Nor had it ever any solid basis, philologically or historically.

Of this whole period no trace has been left in the native country. The stream of development there rolled on, and the native energy of Asiatic humanity led to such a gigantic development, that Kham appeared, even to the Semite, only as an impure stranger. Of the two families, the eastern took by far the higher flight, and its most favoured branches attained a much more perfect organic structure in language, art, and science than the western.

In all the other languages belonging to the family of Sem, the pure historical Semitism appears already so perfectly formed, that there would be an immense chasm left between Khamitism and Semitism if the language of the cuneiform inscriptions did not most auspiciously furnish us with the bridge from that most ancient deposit of the ante-Noachian idiom of primitive Asia to historical Semitism. This important fact we are now going to lay before our readers.

B.

THE ANCIENT CHALDEE,

OR THE LANGUAGE OF THE CUNEIFORM INSCRIPTIONS OF BABYLONIA AND ASSYRIA, AND ITS DAUGHTERS.

I.

The Language of the Cuneiform Inscriptions of Babylonia.

In the paper read by me at Oxford, in 1847, the question was discussed whether the two great nations, the Babylonians and Assyrians, were Semites or not, and the reasons were assigned which induced me to decide this question in the affirmative. We have now obtained, by the decipherment of the cuneiform inscriptions, documentary certainty of this fact. It appears also, from these monuments, that, from the fifth to the ninth century B.C. at least, the cuneiform records of Nineveh and of Babylon represent only slightly differing dialects, more with orthographical than any other difference. But I believe, besides, that we are now authorized in recognizing this language as the sacred language of the ancient Chaldeans. We may also call it the ancient Chaldee, in opposition to the vulgar Chaldee which we find in its last stage in the book of Daniel, the Targums, and the Talmud, but which can be traced to a much higher age. From this vulgar language, which is identical, in all essential points, with the Syrian, that of the cuneiform inscriptions differs more widely than the Old High German of the time of Charlemagne differs from the High German of Goethe, and fully as much as ancient from modern Greek. In order to justify these assertions, within the limits and for the principal object of this book, I shall lay before my readers sufficient grammatical and lexicographical facts to enable them to judge for themselves. But, before proceeding to this exposition, I shall first give the outlines of the history of the decipherment of this class of cuneiform inscriptions, and then explain the elements of the method adopted by me, and the historical results which I believe may be deduced from them.

1. *Rawlinson and Hincks.*

It is generally known that we owe this great and most important discovery to the sagacity and persevering zeal of Colonel Rawlinson, and to the use he has made of his own conquest, the trilingual inscription of Behistun (Bagistana). This inscription contains a recital of the deeds of Darius, by himself, in Persian for the ruling nation and the Medes, who had one language in common; in Aramaic for the inhabitants of conquered Babylonia and Assyria; and (as Rawlinson had most sensibly guessed, and Mr. Norris has since proved) in a Turanian language for the Transoxanian or Scythian populations. This last writing is commonly called the second. Combined with the tablets of Persepolis and Nakshi Rustam, the inscription gives a very considerable number of proper names of persons, countries, and nations. The Persian text having been most satisfactorily deciphered, with the aid of Burnouf's and Lassen's alphabets, corrected and completed by Rawlinson, there was evidently but one safe process in finding out the writing of the third. Enough was known of the second text (generally called the Median by a most unwarranted assumption) to prove that its language was not Semitic; Rawlinson, therefore, most naturally brought the third into connexion with the inscribed bricks and slabs of Nineveh and Babylon, which present the same system, but in a more complicated form.

The proper names, thus identified, amounted to about ninety. It is impossible not to see that this number was sufficient to identify a very considerable number of signs. But these proper names are generally connected with common nouns or verbs (as king, father, son, or, he says, conquered, killed) which could be made out by the signs already deciphered, at least as far as their meaning is concerned. When, by a patient comparison of all the available texts, a sure philological basis had thus been obtained, the investigation of the other words and the grammatical forms was commenced. The Semitic character of the language soon became evident to Colonel Rawlinson. But a great and almost insuperable difficulty presented itself. The number of signs was found far to exceed the range of an alphabet or of a syllabarium. There were thirty-nine Persian signs, all alphabetical, besides a sign of distinction of punctuation, but the Babylonian and Assyrian inscriptions furnished about 250 cha-

racters. Of these, Colonel Rawlinson identified about 100 by the alphabet obtained through the proper names; and fifty more by the further analytical process. Of these 250 signs, he concluded that the greatest part must, of course, be ideographic. He was thus thrown upon the hieroglyphical system as the basis of Babylonian writing; a view which I heard Burnouf express in 1838, and which he demonstrated to me upon a brick which contained signs of mixed writing. But Rawlinson did not meet with the facilities of the Egyptian system, which certainly, when once understood, is as simple as it is ingenious. On the contrary, one and the same character was evidently both phonetic and ideographic, and appeared to be even pronounced in more than one way when used ideographically. Almost all the names of gods and kings were found to be written ideographically; and so strangely, too, that, if they had not been more or less known through the Scriptures and the Greek writers, few could have been identified except by mere guesses. Indeed, Sennakherib and Sargina were at first guessed at, the one by Dr. Hincks, the other by Dr. Loewenstein. Lastly, the knowledge that the language was a Semitic one did not furnish so much assistance here as the Coptic did in Egyptological researches. The Coptic and the Old Egyptian must have been, on the whole, one and the same language, that of the same country: but what was the language of Babylonia and of Assyria? Were they the same? were they Hebrew? They certainly were not what is now called Chaldee, the language of Daniel and of the Targums. There were ideographs for king and son, indicated by the context: was king *melek* or *sar?* was son *ben* or *bar?* or, perhaps, some third word?

The first two chapters of the memoir on the Persian inscriptions at Behistun, written at Bagdad in 1845, and published in 1846, prove that Rawlinson, at that early date, recognized the Semitic character of the third writing and the linguistic identity of the Babylonian and Assyrian monuments. He had found out, moreover, the unsoundness of the Median hypothesis as to the second column, and gave very good reasons for supposing the language to be Scythian and therefore Turanian. As regards the Semitic inscriptions, these chapters bear evidence to the fact that he intended to examine the language, after he had obtained a solid groundwork by a greater number of proper names (p. 29.). This he accomplished by patient investigation of identical or cognate texts. The general results of this method are clearly stated in his lectures delivered in London, in

January and February 1850, by way of a popular introduction to the interpretation of various lists of great historical interest, which he had translated by the help of his key.

Dr. Hincks had already, in 1846 (Transactions of Royal Irish Academy, vol. xxi.), given a list of seventy-six characters of the third order, with their corresponding signs in the Babylonian monuments. In an acute and learned dissertation on the Khorsabad inscriptions, read before the Royal Irish Academy, in June 1849, but printed in 1850, the ingenious author adheres to his Babylonian alphabet, with four, or rather two, exceptions. He acknowledges the identity of all the Assyrian inscriptions with the third order of the Achæmenidian inscriptions, and with the Babylonian texts. The Van inscriptions he believes to belong to an Indo-European idiom. As to the second Achæmenidian column, he attempts to justify the name of Median, and claims for it the character of an Iranian language, although, perhaps, mixed with a Tatar element. Entering, then, into the discussion respecting eight Khorsabad characters, he shows some of them to be ideographic, having also a phonetic value, some to be merely ideographic, and others to represent sometimes, in addition, words with a complement. He recognizes also the existence of phonetic characters, the ideographic value of which has no phonetic relationship with their sound. As an illustration, he quotes the letter I in English, which is used to denote the ninth sound of the alphabet, and read sometimes "one," sometimes "the first." After adducing instances of these different kinds of signs, he applies his alphabet to the royal names of the Assyrian dynasties; but, as he afterwards himself acknowledges, not very successfully. Nabukodrossor (whose name had already been identified) reads, in his interpretation, Nabie-cudurray-uchar: the builder of the south-west palace at Nimroud Aður-ka-dan, or Aður-k-aður, which he identifies with Assaradinos of the Canon, or Assarhaddon of the Bible. Of the name of his father, who built the palace of Koyunjik, and who must have been Sennakherib, he identifies only the former part as San-ka, or, allowing a plural sign, Sankayi, which might be Sanki, which might be Sankin. As to Sennakherib's father (Sargon), he thinks the true reading would be Ci-k'u-ab-aður, which, however, answers to no name; he therefore attempts to show that it might also be read Kinnil-li-n'ā, or Kinnil-li-n'u, Kinniladan of the Canon (626—604 B. C.), or rather Khinziros of Ptolemy's Canon (696—691). To obviate the chronological difficulties, Dr. Hincks proposes various

corrections of the biblical and Greek texts. But those difficulties are, indeed, insuperable. Khinzir is in the Babylonian Canon the second successor of Assarhaddon, who, as well as Khinzir, belongs to the series of the Assyrian vice-kings of Babylon. This series, however, has nothing to do with that of the monarchs of the Assyrian empire, among whom Sargun now takes his place as the founder of a new dynasty. In the Appendix, Dr. Hincks explains his Babylonian syllabarium; and this is the most important part of the lecture. He assumes four vowels: if we combine them with the fifteen syllables having a consonant as initials, we have sixty pure syllables. To these are to be added nine syllables, terminating with a consonant, which, combined with three of the vowels, would give twenty-seven, or, together, eighty-seven syllables.

This syllabarium, Dr. Hincks maintains not to be of Semitic, but of Iranian origin.

In the lecture of May 1850, "On the Assyrio-Babylonian Phonetic Researches" (22nd vol. of Transactions), Dr. Hincks insists most strongly upon this point (p. 296), and then lays down the general method to be finally adopted in the decipherment, in the following words (p. 295. § 4.):—

"It has been taken for granted, that the only method of ascertaining the value of the characters is the analysis of known proper names. It appears to me, however, that, the characters representing what I have just stated that they do, this method can only lead to approximate, as distinguished from accurate, knowledge. The way by which I have sought to obtain accurate knowledge is by analysing verbs and nouns, especially such as have three radicals of which none is liable to be omitted or altered. I assume two principles: first, that the characters which occur in different inflexions of the same root, if they be not the same, must contain the same consonant differently combined with a vowel; secondly, that characters which occur in the same situation, in like forms of different roots, contain the same vowel in the same position, differing only in the consonant. The former principle shows which characters express different functions of the same consonant; the latter shows which are like functions of different consonants."

I must confess that, as these principles are here defined, they appear to me to involve some very doubtful assumptions. It is assumed, in the first place, that the inflexions consist exclusively of vowels, which however is not the case in any Semitic language; secondly, that they are always the same in different roots, which, again, is contrary to what we know of the other dialects of this family. Neither the one nor the other principle applies even to nouns, much less to verbs. In one

word, such a system may be admitted as one of the means of subjective guessing; but Dr. Hincks will not expect that it should be recognized as a scientific method. The results of his own ingenious guesses have, indeed, considerably varied, and I believe that few of them, which were not already arrived at by Rawlinson, will be found conclusive.

The details of this second lecture of Dr. Hincks consist, in part, of a discussion of the syllabarium, and of an attack against single points of the Babylonian alphabet, which had been published in the mean time by Rawlinson; in part, of a chronological discussion respecting Sargon and Merodach Baladan. As to the identification of the latter with Mardokempad of the Canon, he declares that he adopts that opinion advanced by myself.

The difference as to the phonetic values between Rawlinson and Hincks is not inconsiderable; not, however, so great as to stagger the student. I confess I think Colonel Rawlinson's method the only safe one, and that, as regards the value of the sounds, he is right on the whole, although some remarks of Dr. Hincks' are as just as his corrected reading of Sennakherib.

By frequently comparing the inscriptions upon the bricks dug out of the ruins of Nineveh and other excavations, with each other and with the inscriptions upon the monuments in the British Museum, Rawlinson was enabled, as early as in 1849, to decipher a considerable portion of the annals and other historical legends inscribed upon them. The sense of a great number of ideographic signs is perfectly well understood, although there may be a doubt as to their reading. The specimens given by him of the first very successful campaign of Sennakherib against Hezekiah, which is but slightly mentioned in the Book of Kings, and of other events connected with Jewish history, will appear perfectly credible, if these circumstances are duly taken into consideration. It would indeed cost but a few months' study to one of the eminent Semitic scholars of Germany to ascertain the soundness and reality of the system, and perhaps to supply its chasms, if one of them could take courage to study anything except from printed books, and to learn anything monumental except at second-hand. Of course, there are chasms in the interpretation, although less than in the reading: but such is the stereotyped character of these annals, and so unique their simplicity, that in every recently discovered inscription, analogous to that of Behistun, that is to say, annalistic, or at least historical, the greater part of the

groups recur. The number of such inscriptions existing on the monuments in the Museum, or copied on the spot by Colonel Rawlinson, Layard, and their friends, is so considerable that the documents relating to Sennakherib and Nebukadnezzar alone would fill a folio volume each by themselves. Among those of the latter king, exchequer bonds on bricks, payable by the treasurer, are not the least remarkable.

One of the greatest difficulties which presented themselves in the course of these studies, arose from the curious circumstance that before last year no sign had been discovered to indicate whether a group was to be taken ideographically or phonetically. Such a sign has, however, at last quite providentially been found on fragments of a dictionary destined to supply the phonetic key, perhaps even lexicographical explanations for each ideograph. A fragment of such a key-book in single bricks was discovered by Layard, about a year ago, among the Assyrian slabs in the British Museum, while, at the same time, Rawlinson found in Babylonia numerous fragments of the same on bricks. One of these contains the well-known numerical ideographs of the Babylonians, with their phonetic value against them, separated by one and the same sign, which therefore is the index of the phonetic character of the groups: indeed it is found to occur regularly. Now, these phonetic numerals, read with the alphabet published by Rawlinson two years before, furnish the perfectly well-known Semitic names of the corresponding numerals. I owe to the kindness of our common friend, Mr. E. Norris, the successful decipherer of the Scythian text of the Behistun inscriptions, the communication of the letter of Colonel Rawlinson on this great discovery, dated Bagdad 5th July, 1853. My readers may thus convince themselves that the comparative table of the numerals in ancient and modern Chaldee and in Hebrew, given below, is undeniable proof of the correctness of Rawlinson's alphabet, and of our assertion regarding the identity of all the Chaldee idioms.

To doubt the soundness of that alphabet, after such a test, would prove perhaps a vast capacity for scepticism, but it would most certainly evince a total want of critical judgment, or deplorable indifference to truth.

This discovery is important in more than one respect, besides being strong evidence in favour of the correctness of the alphabet and the soundness of the interpretations founded upon the assumption

that the language of those inscriptions is substantially Chaldee. In the first place, we have, among the numerals thus identified and thus read, the word, *sussu*, for sixty, which has not only its organic analogy in all the Semitic dialects, but even its simplest form in Khami or Egyptian, where six is *sū* or *sūu*, the evident etymon of *sus*, the Babylonian form. Here, then, we have an authentic explanation of the sense of the word *sōssos*, which is mentioned by Berosus, Eusebius, Syncellus, and Hesychius, and commented upon by Scaliger, Freret, Ideler, and Niebuhr, as the Babylonian term for their lowest astronomical cyclus. This sōssos we know to have been a cyclus of sixty years. In the second place, we may now safely affirm that the terms for the two higher cycli, *ner*, or ten sossi, and *sar*, or six neri, are not numerals at all; for we have evidence enough proving that the Babylonian or primitive Chaldæan numerals are identical with those of historical Semitism, to exclude any such hypothesis. Whatever, therefore, these terms (which are found in Babylonian) may have been intended to denote *, it is certain that the fundamental cyclus was neither one of 600 nor of 3600, but of sixty years, which is still the cyclus of the Chinese, and, as I shall prove in another place, the basis of the patriarchal cyclus of 600 solar years, and the key to the patriarchal epochs generally.

2. *Problem proposed, and Method adopted.*

I shall now endeavour to lay before my readers both the problem which I proposed to myself when I undertook this research, which I did as soon as I had Rawlinson's excellent materials before me, and the method I adopted to arrive at its solution, with a peculiar regard to the immediate subject of our research, linguistic and historical.

There can be no doubt as to the language of the so-called third inscription of Behistun, and that of the Babylonian and Nineveh bricks, representing essentially one and the same tongue, and that a Semitic tongue.

But it is also evident that this language, which must once have been spoken by the Chaldees of Upper and Lower Babylonia, and

* *Sar* has been supposed to represent the Babylonian word for moon, Chaldee *sáhâra*, Syr. *suhara*, Arab. *shehr*. As it stands, it reads like the word for Prince, King. *Nēr* may come from *nahar*, servant (puer): as it stands, it means, in Chaldee and Hebrew, light, splendour.

in Kurdistan, is neither Hebrew nor Aramæan (Syro-Chaldee). The question then arises: Can it be said to be the mother of either of these languages? and was it really spoken, in the historical times, as the vulgar Chaldæan tongue? If so, it must be essentially the same as the Aramæan, a name which applies equally to Mesopotamia and to Syria, and which, from the days of Ezra, prevailed in Palestine over the antiquated Hebrew. Now, this language is called by the Septuagint Chaldee, an appellation afterwards loosely used even for the language of the Jewish Scriptures, because the later Jews spoke the universal language of Syria. Without attributing any authority to the vulgar denomination of this language as Chaldee, there can be no doubt that, as it is now spoken (as the Syrian dialect) by the "Chaldæan Christians" in Kurdistan, called Nestorians, so at latest, at the time when the Book of Genesis received its present complete form (that is, in David's or Solomon's time), it was the language of Mesopotamia. In Gen. xxxi. 47., the Hebrew and Aramæan names of a place in Mesopotamia are mentioned in juxtaposition: the Aramæan name, which Laban is recorded to have given it (Jegar-Sahaduta, "the mound of witness"), is as pure Syro-Chaldee, as the corresponding name given it by Jacob (Gal'êd) is pure Hebrew. That chapter belongs to the older class of records, and I think it is highly probable that these words were handed down from the earliest records, and therefore from the ante-Mosaic age.*

An inscription on a sheet of lead found in a sepulchral jar at Abu-Shadr in Lower Babylonia, copied by Rawlinson, deciphered by Professor Dietrich, to whom Mr. Norris kindly communicated it, and engraved on the second of the plates belonging to this chapter, exhibits not only traces of the syllabic writing, which is a peculiar feature of the phonetic cuneiform writing of Babylonia, but contains also in the forms of the letters the germ of the so-called square Hebrew of the Syrian and Arabic alphabet. The inscription cannot be of a very late date, as Rawlinson says that it was found "among Chaldæan remains." The language itself is decidedly of the Syro-Chaldæan character, not that of the cuneiform inscriptions.

The most natural explanation of these facts seems to be, that already in the time of Nebukadnezzar, and probably much earlier,

* The Aramæan verse in Jerem. x. 10. would furnish still more direct evidence that the common Aramæan language of the time of Nebukadnezzar was exactly that of Esdras, were it not evidently a gloss (although an old one) awkwardly admitted into the text, in which it makes a break.

there existed, besides the official and sacred language and writing, a vulgar tongue, used for private purposes, and written exclusively in phonetics. This language had an alphabet analogous to those of the other historical Semitic nations, but with some remains of the syllabic system, which constitutes the phonetic basis of the monumental language.

The immense difference in the stage of development between this alphabetically written language and that of Behistun, obliges us to consider the language expressed by the cuneiform character as the most ancient phasis of Asiatic Semitism, anterior to our historical times. Indeed, many collateral circumstances compel us to assign to it a very remote, perhaps a Noachian age, and to place it next to the last Asiatic idiom preserved by the Egyptians. The cuneiform alphabet appears coëval with the history of the most ancient Babylonian empire, and must have had its origin in Lower Babylonia.

The best method, therefore, to be adopted at the present stage of the inquiry, and for the subject of our research, would seem to be first to exhibit the alphabet, as far as it is ascertained; secondly, to examine the grammatical forms; thirdly, such of the roots as appear to have been ascertained beyond any doubt.

II.

The Facts of the Language of the Cuneiform Inscriptions of Babylon and of Nineveh.

1. *The Syllabarium.*

The cuneiform mode of writing is most ancient in Babylonia: it must have originated there, as will be shown more fully hereafter, because it is calculated for making impression on clay, and consequently for being used on bricks, but not on stones.

In the general history of writing, it can only be considered as the conventional fag-end of the hieroglyphical system, that is to say, of the expression, not of sounds, but of things represented by images or symbols.

The cuneiform system has fixed the language in the transition of that writing to the phonetic system. Its phonetic alphabet is throughout a syllabic one. I subjoin the tables of the syllabarium, as I had constituted it in 1852, after the study of Rawlinson's tables, before I had read Dr. Hincks's lecture.

I find that the Babylonians had the following alphabetical system:

The three fundamental vowels - -	A	I	U
Three diphthongs, of not quite certain pronunciation: I give what is recommended by the general laws of sounds:	AA	AI or YA	AU or VA

Fourteen consonants:

ב	ג	ד	ז	ל	מ	נ	ס	פ	צ	ק	ר	ש	ת
b	*g*	*d*	*z*	*l*	*m*	*n*	*s*	*p*	*ç*	*q*	*r*	*sh*	*t*
	(lingual)		(ds)				(sharp)		(palatal sharp *s*)				

Omitting the diphthongs, as an element not sufficiently ascertained, the combination of the fourteen letters, with the three vowels, gives forty-five pure syllables: eight of those fourteen consonants, namely,

l m n p q r s t

form also, with each of three vowels, impure syllables; that is to

say, syllables ending with a consonant, which implies the suppression of the inherent final vowel. Thus we get the following syllabarium:

ba	bi	bu			
ga	gi	gu			
da	di	du			
za	zi	zu			
la	li	lu	al	il	ul
ma	mi	mu	am	im	um
na	ni	nu	an	in	un
sa	si	su	as	is	us
pa	pi	pu	ap	ip	up
ça	çi	çi			
qa	qi	qu	aq	iq	uq
ra	ri	ru	ar	ir	ur
sha	shi	shu			
ta	ti	tu	at	it	ut

We have consequently (at least) sixty-nine syllables, of which twenty-four, according to the general rules of phonology, were originally disyllabic, as ala, ili, ulu, etc.

2. *The Ideographic Signs.*

All the remaining signs, about 180, are ideographic. Of some we know the meaning, and not the sound; of some the sound also. The ideographic, with unknown or uncertain sound, are, besides the names of the gods, and those for Babel (Bab-ila, Gate of God, or Ba-bel, house of God), Nineveh, and Assyria:

God, fire, sun (probably shamash), moon, earth, coast.
Time, year, month.
King (probably sarru), army, soldiers, war, battle.
Mankind, people, or tribe (probably lisanu, tongue), family, name.
Father (probably eta), mother, son, brother, sheep.
House, door, cart, walls.

As determinatives, in the sense of the Egyptian alphabet, the following have been ascertained:

1. Determinative of:

   Noun proper — man, young man, order or class.
   Cattle, town, great city, place.
   Fire or fiery, gold and silver, stones.

2. Signs for grammatical forms and numerals exist for:

   Masculine, feminine, dual, relative (genitive), numeral signs (units as fingers, ten as hand).
   Preposition *to* (ad=*ana*).
   Conjunctive particle: *va* (et).

Lastly, the following (and some more or less certain), are ideographic for ordinary words or roots:

1. Monosyllables, with a vowel between two consonants.

   Bab, bil, bul, bar, bir, bat, bit.
   Gap, gur.
   Dak, dun, dem, dan.
   Lak (lik?), lah.
   Maq, mar, nur.
   Nis.
   San, sap.
   Par, pis.

Çir, çur.
Qal (kal ?), qar (kar ?), kam, kim, kan, kin, kip, kur (kum ?).
Rab (rab ?), rap, rip, ral, ras, riq.
Sak, suk, sun (son ?), sep, sar, sur, sas (?), sut.
Taq (tak ?) teq, tuq, tan, tap, tur.

2. A consonant, with a vowel before and after it:

Ili, Ila.

This system of writing, as far as it is ideographic, points to a language which has emerged from the age of bare roots or particles, but which still bears the marks of the pure hieroglyphical system adapted for that stage. As far as it is a phonetic syllabarium, it coincides, as we shall see, with the principle of the Himyaric movement, which is still preserved in the Ethiopic. It certainly, therefore, cannot be said to be foreign to the Semitic languages, whether we look to facts or to the philosophical argument.

3. *The Roots of Ancient Chaldee.*

We shall now show, that the old Babylonian language possessed, if not exclusively, at least predominantly, biliteral roots, and that these find their correspondent forms in the developed biliteral state, according to the laws established by Professor Dietrich and Dr. Boetticher in the Appendix.

gab (Rawlinson writes *guv*, but in the text always *gab*) to say, is certainly not connected with the Arabic *qâla*, he said; but may be compared with the Hebrew *gab* in *gābah*, elatum esse *trans.* efferre: compare *nāsá*, to heave up and to pronounce.

ten, to give, has nothing to do with the Sanscrit dâ, Greek διδόναι, and Latin dare (roots which have their Semitic analogy in the Hebrew nêdeh, μίσθωμα), but may be compared, as Colonel Rawlinson has done, with the Hebrew *nātan*, he gave. Nātan and the altered Syriac netal correspond with the Greek root *tan* in τείνω.

ar, to be or become, identical with the Egyptian *ar*. Compare the Coptic er or el, to be, and the Turkish dialects öl in ölmek, &c.

duk, "to smite or kill. Hebrew daq, Arab. daq, used exactly like the Babylonian duk," *Rawl.* Compare Sanscrit *daç*=Greek δάκνειν.

rak, to go over. Colonel Rawlinson compares the Arabic *ragi'a*, he returned, but the root gives K and not G. Rather compare the Hebrew *ārak*, to extend, *ārēk*, long, and *rākal*, to go about, *rōkēl*, the travelling tradesman; perhaps also the Coptic *aloch*, foot.

mit, "to die, Hebrew mût," *Rawl.*

rad, "to go down, Hebrew yārad," *Rawl.*

tâ and *bâ*, "to come. Compare *ātâh* and *bô* in Hebrew," *Rawl.*

ru, to go. Arabic rûḥ, to go, Hebr. ārah, Sanscrit ruh. Compare Greek ἔρχ-εσθαι, equal to a supposed Sanscrit root, *ṛh*. In Persian the root is just the same, as the imperative, *rav*, go thou! proves the infinitive to be raftan, to go. In Coptic we have perhaps a derivation of the same root in the word *rat*, foot, formed, as Dr. Boetticher thinks, by the suffix *at*, or *ti*.

el, "to go up or ascend, 'ālāh in Hebrew," *Rawl.*

ber, "to cross over, 'ābar in Hebrew," *Rawl.*

lak, "to reach, comp. Arabic laqay to reach, to meet, to obtain," *Rawl.*

kun, to appoint, establish, or do ; kun (rather kônēn) in Hebrew. The Persian *kardan*, to do, imperat. *kun*, is in Sanscrit kṛ, and the derivation of the present participle is found in the Latin cerimonia= id quod agitur.

çeb, to set up or fix, comp. yāçab and nāçab in Hebrew, and naçaba in Arabic, *Rawl.* The root exists also in Syriac, *neçab.*

shib, to dwell. Hebr. *yāshab*, he sat, *Rawl.*

men, to allot. Hebr. *mānâh*, he divided, allotted, *Rawl.*

shar, to go out. Arab. sâra, he went.

Triliteral Roots from the Behistun Inscription.

banas, to do, make ; Heb. Chald. Arab. banah (*exstruxit*).
biyasu, to be evil ; Heb. bā'ash (*fœtuit, malus fuit*), Chald. be'ēsh (*malus fuit*).
danu, to help ; Heb. dîn (*rexit, judicavit, tuitus est*), Chald. dîn (*judicavit*).
ebus, to make ; Heb. 'abad (*coluit, serviit*, Chald. Syr. *fecit*), Arab. abada (*coluit*).
kasad, to reach, arrive ; Arab. qaçada (*intendit, venit, prope fuit*).
nakar, to rebel ; Heb. nakar (*peregrinus fuit*, Pi. *repudiavit*).
naqam, to vindicate, or rescue ; Heb. Arab. naqam, naqama (*ultus est*).
nasa, to bring ; Heb. nasa' (*tulit, attulit*).
paraṣ (*paraç*) to lie ; Heb. paraç (*disrupit, violenter egit*).
piyali, to roll ; Heb. pûl, or palal (*volvit*), Syr. palpel, the same.
ṣabat (*çabat*), to seize ; Heb. çabat (*corripuit, colligavit*, Arab. *arripuit*).
ṣur (*çur*), to protect ; Heb. çûr (*rupes, refugium*).
ṣava (*çava*), to belong, obey ; Heb. çavah, Pi. (*constituit, jussit*).
vadak, to know ; Heb. yada' (*novit*), Chald. Syr. yeda' (*scivit*), Arab. vada'a (*novit*).

Other Triliteral Roots verified by Mr. E. Norris.

arak, to lengthen ; Heb. Syr. Arab. 'arak (*extendit*).
balla, to destroy ; Heb. bālah (*collapsus est*, Pi. *consumsit*, Chald. *afflixit*).
darak, to proceed ; Heb. Syr. Chald. darak (*calcavit, ingressus est*).
halak, to go ; Heb. Chald. halak (*ivit*).
kalla, to hold, restrain ; Heb. Chald. Syr. Arab. kala' (*clausit, cohibuit*).
malla, to fill ; Heb. Chald. Syr. Arab. male' (*plenum esse*, Pi. *replere*).
sadar, to write ; Heb. shaṭar, Arab. saṭara (*scripsit*).
sarap, to burn ; Heb. saraph (*combussit*).
vara, or *ura*, to see ; Heb. Arab. ra'ah (*vidit*).

4. *Grammatical Forms.*

a. *The Pronominal Forms.*

First Person.

I. 1. Anaku (an-ak-u). *Egypt.* anuk, *Heb.* anoki, *Chald.* ana.
2. Tu (Compare the forms for second person in *Heb.* atta = an-ta, *Chald.* at, and the suffix of 1st pers. sing. perf. in *Arab.* tu, *Heb.* ti).
3. Attua (= an-tu-a).

Possessive Nominal Suffix.

1. A alone, Abu a = *Heb.* Ab i, Πατήρ μου.
2. Ya, alone. Mati (*terra*), mati-ya (*terra mea*), pani-ya (*facies mea*).
3. Tua, Açpana tua = *Heb.* לְפָנַי (li-phen-ai), *ante faciem meam, ante me.*
4. Combined form, attua . . . ya as the absolute pronoun before, the suffix behind: Attua abua (as it were: *my father of me*). In inverse order, yakhsa-ya attua (*genus meum, ego*).

As suffix to the Verb, ni, inni,
pl. Uni (*noster*): yakhas-uni (*genus nostrum*).

Second Person.

Ka (*tuus*).

Third Person and Demonstrative.

He, this, she. { Suva, *m.* *Heb.* Zeh (זֶה). Compare zu (זוּ) com. *hic, hæc.*
Suat, *f.* *Heb.* Zôt (זֹאת).

As suffix to Noun, Su (*ejus*): akhi-su (*frater ejus*).

Other Demonstratives:
Haga (compare agi, in Himyaric), m. (*hic*).
Hagata, f. (*hæc*).
Haganut, pl. m. (*hi*).
Haganet, *pl. fem.*
Haga suva, = *he himself, this there*
{ Anna ta, *nomin.* / Anna te, *cas. obliq.* } *this.*

Who (Relative pronoun). Sa.

The relative construction is still fuller than in Hebrew :

Sa	anaku	yatsive	inni = *Heb.* asher. . . . li.
Quæ	*me*	*pertinent*	*ad me.*

They, their. Sunu (Rawl. finds also sunut).
Suna („ „ sunat).
As suffix, Sun (*eorum*).

b. *Adverbs and Prepositions.*

Ha-kannu (*from* haga) *at this place, here.*

Khe-bi,* *In the place* (בְּ). *Instead. From among.*
Ita ut, ὥστε, secundum quod.

Aç. *By, with, of, in.* Compare êt *Heb.*

Aç khebi. *Of, from among.*

Aç pana. } לִפְנֵי *ante faciam meam.*
Aç pani. }

In Assyrian inscriptions also :

Aç paniya (*the full form*).

Aç yasmi, = *per gratiam, voluntate* (*Hormuzdæ*). Compare *Heb.* יְזִמּוּ Gen. xi. 6.

Makhri (corresponding with the Persian *paru*) *before.*
(The word has originally the sense of *ancient* and of *many*).

Ana } *Ad.*
An }

Ana anaku = *ad me.*

c. *Flexional Forms of Noun.*

Sing. nom. masc. U. *Casus obliq.* I, A. also by the præp. ana, as :
Madatu (*tributum*), madata (cas. obl.).
Annata (*hic*), aniti (cas. obl.).

Plur. masc. ut.
fem. et.

* Rawlinson, (p. vi.) reads doubtfully *eb-bi.* But his note on the same passage shows that the first character answers to the Hebrew ke or kh כְּ.

Compare haganut (*hi*), haganet (*hæ*), ellut (*dii*), ellet (*deæ*), madut (*multi*), madet (*multæ*).

We have another termination in sunu (*ii*), from su or suva (*is*). We find this termination of the plural increased by the article -a suffixed to the noun, as is usual in Chaldee and Syriac, in Suraya (*Tyrii*), Sidunaya (*Sidonii*), Gebalaya (*Gebaleni*).

d. *The Numerals.*

	*Ancient Chaldee.**	*Hebrew.*		*Modern Chaldee.*	
I.		'ekhad, *m.*	akhat, *f.*	khad, *m.*	khad'a, *f.*
II.		shenajim, *m.*	shetajim.	terên,	tartên.
III.	(silas).	shelôshah,	shalôsh.	telâta',	telât.
				(*Syr.* also, telîta.)	
IV.	(irbay).	'arba'ah,	'arba'.	'arbe'a',	'arba'.
V.	khamisti.	khamishshah,	khamesh.	khamsh'a	khamesh.
VI.	(sus).	shishshah,	shesh.	shitt'a,	shet.
VII.		shibe'ah,	shéba'.	shibe'a,	shebâ'.
VIII.		shemônah,	shemôneh.	temanja',	tamnê.
IX.		tishe'ah,	tésha'.	tishe'a',	tesh'â.
X.	esirat.	'asarah,	'eser.	'asra',	'asar.
XV.	khamissirat.	khamesh 'esrê.		khamsh esrê.	
XX.	sanra (or sanna).	'esrîm.		'esrîn.	
XXX.	silasa'.	shelôschîm.		telâtîn.	
XL.	irbaya'.	'arba'îm.		'arba'în.	
L.	khan sa'.	khamishshîm.		khamshîn.	
LX.	sussu (or sussi).	shishshîm.		shishshîn.	

On the Assyrian weights, in the form of lions, in the British Museum, we find, in old Phœnician characters, reba' (a quarter), khamsha' (five), and khamsha-asar (fifteen). These weights are of the time of the Assyrian empire; one of them bears the name of Tiglath-Pileser. My learned friend Mr. E. Norris will, it is to be hoped, soon publish his lecture on those interesting monuments.

e. *Flexional Forms of Verb.*

There exists, as in the other dialects, a formative tense as perfect, and a preformative tense as future. The second is the tense more frequently used. As to the forms, we find the Hebrew Kal and Niphal, and the Chaldee Pael and Ethpaal, and others.

* The first three numerals are not yet found; but three, four, and six may be supplied from the corresponding forms of 30, 40, 60. Dr. Hincks reads *shalishi*, *rubbiti*, and *qanisi*, for three, four, and five.

Forms of Imperfect verified.

Third Person.

Sing. U, *preform.* ya.
Perf. Gabu = *he speaks, spoke.*
Imperf. Yakbu (Kal), in *Heb.* it would be yagbeh
Yagabbi (Rawl. *in the table* igabbi), from Pael.
Yaggabu (=yangabu), from Niphal.
Yatibus, *egit*, from ebus. As Ethpaal : also,
Yatba (*venit*).

Second Person.

U, *preform.* ta.
Tagabbu (Pael), (*dixisti*).

First Person.

A *or* I, *preform.* a.
Akbi (Kal).
Hagabba (Pael).
(There occurs also ebessu *feci*, from ebus *fecit*).

Third Person.

Pl. Uni, U (as in *Heb.* U, compare *Arab.* Una.)
Yatipsu (Ethpaal *Chaldee*). Yatbuni (*venerunt*); yaprusu (*mentiti sunt*), from parras (*to lie*); yatturun (*fuerunt*).
Yatibus.

First Person.

Nitibusu (*fecimus*), nitibir (*transivimus*).

Participle.

Huparrasu (*mentitus*), vaptarris (the same, from Iphtaal).

Formation of Sentences.

Verb Substantive concrete.

Third Person. Sing. Yattur (*fuit*). Yatturun (*fuerunt*).
First Person. Sing. Attur.

Anna	Sarru	Yattur.
He	*King*	*was.*
Ana	Sarru	Attur.
I	*King*	*was.*

Copula (verb subst. absol.) not expressed :

Anaku Sarru.
Ego (sum) Rex.

f. *Status Constructus.*

Sa, (as relative) is placed before the noun, which is in the genitive.

Sa	Kambuziya	hagasuva	akhisu	Barziya.
Τοῦ	Καμβύσου	τούτου	ἀδελφὸς	Βαρδίης (Smerdes).

That the genitive is here placed before the nominative has an analogy in the Mesopotamian towns, as Tigranocerta: but it may be said that it is contrary to historical Semitism.

This explains the name Metu-sha-el, in the list of the patriarchs = Metu-sa-êl, *Vir (qui) dei.*

The other form, Metu-shélach, has evidently been resorted to when the original (Babylonian) form had become unintelligible in Hebrew. As to the *u* as termination, we shall find it in Hebrew names, Shemu-el, Achumai, Khamu*al, Penuêl, Re'uêl.

As to the use of the relative instead of the status constructus, or the affection of the first (nominative) of the two substantives, it corresponds entirely with the Egyptian *nti.*

The Sa corresponds with the Hebrew *sh* (Shin), and is another proof of the antiquity of this formative for *asher* in the northern dialect. We find this formative also, in the same signification, in the Phœnician inscriptions, as Gesenius first, in his "Monum. Phonic.," and afterwards Movers, in his "Punic texts in Plautus," 1848, pp. 79. 84., have amply demonstrated.

The expression in modern Chaldee, "*gebar* or *gabra' di Elaha*" (Syr. gebar *de* Eloho), for vir dei, is perfectly analogous: for *di* is the Hebrew demonstrative Zeh. In the Carpentras Inscription this is written *zi.*

III.

The Position of the Language of the Cuneiform Inscriptions of Babylonia in the general Semitic Family.

The facts we have laid before our readers enable us, I believe, to prove that the language we have examined represents, indeed, as we have assumed, the fixation of the earliest stage of Asiatic Semitism, the phasis next to the Egyptian or Khamitic deposit. The principal phenomena upon which we wish to fix their attention are the following :

1. *The system of sounds and the nature of the roots.*— Most, if not all, of the roots are biliteral, and occur in the other Semitic idioms, generally in an enlarged form. This is an undoubted proof of priority in favour of the Babylonian, as the whole history of the formation of roots demonstrates. As to the relation between ancient Babylonian and the later idioms, the nearest degree of kin is in the Northern Semitic, the most remote in Arabic. Of the eighteen bisyllabic roots exhibited, two only occur exclusively in Arabic; all the others are common to the Babylonian, with the Hebrew and Syro-Chaldæan, but principally with the Hebrew. Two alone of those sixteen (*ar.* and *gab*) are not found even in Hebrew, but can be more easily explained from this language than from any other: of the remaining fourteen, seven are found in Hebrew exclusively, whereas the rest are met with both in Aramæan and in Hebrew.*

* The following is the complete Comparative Table :

	Hebrew (and Arabic).	*Aramæan.*
AL, *ascendere.*	'alah,	sĕlaq.
RAD, *descendere.*	yarad (varad),	nĕkhat.
BA, *venire.*	b'o,	'atâh.
BAR, *transire.*	'abar,	khălaf *and* 'adâ.
KUN, *erigere, facere.*	kûn, hekin,	(*several words*).
SHIB, *habitare.*	yāshab,	yĕtĕb.
TAN, *dare.*	nātan,	yĕhab.

Natan is found only in the Chaldee books of the Bible, and only in the future.

Now, this is analogous to the relations which the Gothic bears to the later German dialects: some of its roots are preserved in the one, some in the other. The more ancient languages are not so exclusive as to many differences which become afterwards distinctive of the idiom. Thus we regularly find, in the Syro-Chaldee, *t* where the Hebrew has *sh*, and the Arabic *ts:* still the old Babylonian has *shib* and not *tib*, but sides with the Hebrew.*

The whole scale of sounds in Hebrew, Aramæan, and Arabic is given in the Comparative Tables appended to this chapter; it results from this scale that the old Babylonian sides in most cases with the Hebrew, which is one of many proofs of the tenacious character of historical Hebrew, although it had, in a former stage, lost many of the ancient forms.

2. *The grammatical forms.* — The pronouns are remarkable for showing that whatever is not entirely different from the historical Semitic is found exclusively, or at least best preserved, in Hebrew. Thus 'anaku, Hebr. 'anokhi, Aram. 'anā (Hebr. ani). The antiquity of the form anokhi is proved by the Egyptian.

As to the sign for the nominative, we find it only preserved in the Arabic. In this language also is preserved that primitive system of vocalism in the conjugation which must once have existed, according to the view of the critical grammarians, in Hebrew and Aramæan. Thus the form Pael or Paal is more ancient than the Hebrew form Piel.

The *ye* in the formation of the future, which the Babylonian has in common with the Hebrew and the later Chaldee, whereas the Syrian has *ne*, points probably to an original difference; the two forms are independent of each other.

A decisive proof of the paramount antiquity of the Babylonian, is the final *u* in the future: it is found in Arabic, and the Hebrew exhibits remains of it.

3. *The status constructus.* — The antiquity of the Babylonian method of expressing the relation between two substantives (as Metu-sha-êl), which we express by the genitive, is proved by the analogy with the Egyptian. They both approach nearer to the nature of a particle-language than the methods employed by the historical

* Although the Aramæan avoids generally the assibilated dental (*z*), we meet in the Palmyrene inscriptions, and in the Chaldæan found in Egypt, with *dzi* (demonstr.) and not *di*.

Semitic idioms. Another proof is the fact that remains of this formation are found as ruins, as isolated phenomena, in these idioms.

The startling form, analogous to "king's son" or "Cambysis frater," reminds us of some of the most ancient fragments of Hebrew speech.*

* Thus Ewald in his Hebrew Grammar explains, Gen. xv. 2., the words Dammesheq Eliêser, Eliesr Damasci = Damascenus; and, in Amos (iii. 12.), Dammesheq 'Eres, Damasci Sponda = Damascena. I would add that, wherever the practice of placing the adjective before the substantive prevails, the system is originally the same as where the genitive is placed before the nominative.

IV.

The special Relation of the Chaldee in the Book of Daniel to the Monumental and to the Historical Chaldee.

Nobody will maintain at the present day that the Chaldee of the decree of Nebukadnezzar in the book of Daniel is the language of the official decrees of that king. The two languages differ much more than ancient and modern Greek.

But neither can it be maintained, that the Chaldee of Daniel is at least as ancient as that found in Ezra, which it necessarily would be if that book were written in the historical or vulgar Chaldee of the time of that king. On the contrary, it is much younger, independently even of the circumstance that it is already mixed up with Persian and Greek words, which began to creep in under the Persian empire, and in the Seleucidian epoch, and which go on increasing in the Christian age. Of this we may quote the following instances:

Persian Words in Daniel.		*Greek Words in Daniel.*	
sagan (from shikhna, *præfectus*).*		qîtharos,	κίθαρις.
keraz (from keristen, *proclamare*). Compare Greek κηρύσσειν.		sabb kha',	σαμβύκη.
		sumponyah,	συμφωνία.
nebizba (from nuwaza, *donatio*).		pesanterîn,	ψαλτήριον.

The following remarks will suffice to prove:†

First, that biblical Chaldaism differs materially from the later or Targumic Chaldee.

Secondly, that the Chaldee of Ezra is older than that of Daniel.

* This word *sagan* occurs also in the last chapter of Jeremiah — which, for many other reasons, must be considered as an appendix — and in Ezra and Nehemiah, as a term for the Persian prefect. Indeed the word cannot be explained as a Semitic formation; it is neither Babylonian, nor Hebrew, nor Arabic.

† On the subject of this paragraph, and the arguments advanced in it, we refer the reader to Dr. F. Dietrich's work "De Sermonis Chaldaïci proprietate," Marburg, 1838.

We term *biblical Chaldaism* the language of documents and narratives which occur in Ezra (iv. 8—vi. 18. and vii. 12—26.), and in Daniel (ii. 4—vii. 28.), in order to distinguish the two writings of the Old Testament from the *Targum*. This difference between biblical and Targumic Chaldaism is mainly a twofold one:

1. Hebrew words and Hebrew formations occur more frequently in the former, and

2. Some Archaisms of the Chaldee language are found in the biblical passages which entirely disappear in the Targum.

It is evident that the substitution of the Aramaic for the Hebrew among the Jews was, during the first centuries, an incomplete one, and that, consequently, Hebrew words and grammatical forms would frequently insinuate themselves into Aramaic writing. Thus the Hebrew termination *îm*, for the plural of a substantive, actually occurs once in a Chaldee passage of Ezra. The plural pronoun *ĕlleh* also is found in Ezra, which belongs to Hebrew alone, and occurs in none of the later Aramaic writings. One of many instances of a common Hebrew verb remaining in use in Ezra, but giving place in the book of Daniel to the Aramaic synonyme, is *jetab*, to please, for which Daniel invariably uses *shephar*. A very striking case is the almost constant occurrence of the verbal conjugations Haphîl, Hithpeal, and Hithpaal, instead of the Aramaic Aphel, Ithpeal, Ithpaal; likewise, of the Hebrew passives, Niphal, and Hophal, instead of the Aramaic Ithpeal and Ith-aphel (Itthaphal).

Instances of Aramaic archaism are the pronominal forms lekhôm (vobis) and lehôm (iis), dēkh (hic) and dakh (hæc), frequently occurring in Ezra. We refer, as to these forms, to the comparative table below. A similar difference of older and later forms occurs in the conjugation of the verb substantive:

leheveh	instead of	{ yeheveh, *erit, sit.* / meheveh, *esse.*
lehevôn	„	yehevôn, *erunt.*

These Aramaic archaisms also are neither to be found in Hebrew nor in any of the Targums, and therefore they represent the old genuine Aramaic or Chaldee, although revived subsequently by Rabbinical authors.

The biblical Chaldaism, as a whole, is therefore evidently an older form of the same language than the idiom used in the Targums; of which the most ancient portions are contemporaneous with Gamaliel and the Apostles.

But if we examine more closely into the subject, and compare Ezra and the book of Daniel with each other, the latter forms evidently a bridge towards the language of Onkelos and of the Targums in general, exactly as the Targums, on the whole, form a bridge to the language of the Talmud. We can prove this by the fact that, in the instances above mentioned, and in many similar cases, the language of the Chaldee passages in Daniel approaches more nearly that of the Targums, and must therefore of necessity be considered as more modern than the Chaldee in Ezra.

No traces are to be found in Daniel of such pure Hebraisms as the *îm* and the *ēlleh*, which we have just mentioned as still occurring in Ezra. On the contrary, while the Chaldee of Ezra shows only the Hebraizing verbal form Hithpeal, the book of Daniel gives us, besides, several instances of the corresponding Ethpeal, which is clearly Syriac.

The pronouns lekhôm and lehôm, dēkh and dākh, are changed throughout in Daniel, as they are in the Targums, into the modern forms lekhôn, lehôn, dēn and dā'. The plural pronoun generis communis (hi, hae, haec), which is illēkh and ēlleh in Ezra, is almost constantly *illēn* in Daniel and the Targums.

The following Comparative Table of Pronouns will show how uniform and constant are the differences between the older Chaldee of Ezra and the more modern of the book of Daniel.

Ezra.	*Daniel and the Targums.*
ron. pers.:	
2nd pl., lekhôm.	lekhôn.
3rd pl., lehôm.	lehôn.
Demonstrative:	
Sing. m. dēkh.	dēn.
f. dākh.	da.
com. denah.	denah (dikkēn).
Plur. com. illēkh, ēlleh.	illēn (illēkh).*

* The forms dikkēn and illēkh occur rarely in Daniel, but never in the Targums.

C.

THE ARABIC,

THE CULMINATING POINT OF SEMITISM;

OR

THE HIMYARIC WITH ITS ABYSSINIAN DEPOSIT, AND THE LANGUAGE OF NORTHERN ARABIA WITH THAT OF THE INSCRIPTIONS IN THE SINAITIC PENINSULA.

We have already discussed, in the introductory part of this chapter, the intricate question: whether the Arabic is to be considered as a later development of the stage represented in Northern Semitism by the Hebrew system; or whether Hebrew exhibits a Northern-Semitic idiom, shorn of that variety and symmetry of forms which it must have possessed in a prior stage of existence, collateral with what literal Arabic is now.

A closer examination of the facts will confirm the decision we were led to by more general considerations.

As to these facts, we think it as unnecessary with Arabic as it is with Hebrew to enter into details, as these languages are so generally known, and the point at issue is not contested. The Comparative Tables appended to this chapter contain all that is required for our purpose.

But we must be more explicit as to linguistic facts respecting the South Arabian settlements, which claim the first place, according to chronological order.

I.

The Himyaric or South Arabian settlement, and its deposit in Africa.

Of the Arabian languages preserved to us, the Himyaric, or the language of South Arabia, occupies the first place. Although so recently, and still so imperfectly known, we may safely assert that it represents the remains of a formation anterior to what we conventionally call Arabic, that is to say, to the language of the Hedjaz.

According to the indigenous tradition, this language was that of the second Adite empire. The first Adites are known to history only by their fall; the historical period begins with the "second Adites," who founded a mighty empire in the actual abodes of the first (Yemen and Hadramaut).

As to what was known respecting the inscriptions discovered in the seat of that once mighty and flourishing empire, down to the year 1843, I beg to refer to Prichard's report in his admirably clear article on the Semitic languages, contained in the third volume of his work published 1844, pp. 579—584.

The inscriptions found and copied by Seetzen (1810), by Lieut. Wellsted (1830), by Fresnel (1830), and by Cruttenden and Hutton (1838), were first made the object of philological analysis by Gesenius, and then, more successfully, by Rödiger (1841). The inscriptions seen and copied by the enterprising M. Arnaud in 1841, were published by Mohl, with Fresnel's transcriptions and illustrations, in the Journal Asiatique of 1845. In thefollowing year Ewald, who had already, in 1843, recorded his somewhat different opinion upon certain points (Zeitschrift für die Kunde des Morgenlandes), took up the subject (in Hoefer's Zeitschrift für die Wissenschaft der Sprache) with his usual profound learning and genial sagacity. He considers the alphabet to be settled by Fresnel, who has principally based it upon the Berlin Arabic manuscript, while he entertained, however, some doubts as to the precise phonetic value of two or three of the characters.

The identity of this alphabet with that of the Gheez or ancient Abyssinian, the language of Axum, or the old Tigráni idiom, has never been contested. We shall, in our Comparative Table at the end offer

direct proof of this identity, and then show that they are both a branch of the Phœnician alphabet. Ewald regrets that we possess as yet no real fac-similés, and that many of Arnaud's copies are evidently inaccurate or incomplete. Seetzen indeed seems to have been the only one who made a real fac-simile copy of his Mareb stone, which he probably brought with him to Cairo, and which has either perished there, or is still hidden somewhere in Europe. It is strange that Ewald persists in assuming that, as a general rule, the inscriptions run from left to right, although he does not deny that there are some written from right to left: but, indeed, all those which have hitherto been deciphered by himself or others run from right to left. A few only are written boustrophedon, that is to say, the beginning of the second and fourth lines, and so on, following immediately after the end of the first and third, and so throughout. Rödiger's law on this point, therefore, seems to hold good.

Ewald considers the following grammatical forms as established:

Ha, a causative preformant in verbs, like the Hebrew Hiphil: only that this *ha*, or *h*, pl. *hān*, appears also in the termination of the so-called future or imperfect.

An, the sign of the plural, like the Æthiopic, both in the masculine and feminine: *beit*, house; *beitan*, houses. Rödiger's *m* (*im*) for plural seems not quite certain.

By the side of this plural formation we find also the ordinary Arabic form *aktab*, as:

Shéb, branch, tribe; *asháb*, tribes.

The *genitive* is expressed by the *status constructus*, but sometimes also, in the Æthiopic manner, by the interposition of *d* (Æth. *za*, Syr. *de*, Chald. *di*). This *d*, *ds*, is originally, therefore, a demonstrative and relative pronoun (like the Hebrew *zeh*).

Agi, in the sense of relative pronoun, is still uncertain.

Ha is the article, as in Hebrew. We find *hamlk Sba*, the king of Saba, as in Hebrew and Arabic before nouns proper.

The personal pronoun plural is generally *humu* (*eorum*), in the reflective sense of *ipsorum*. Ewald has pointed out the form *ib*.

Such words as we have been able to identify with certainty or with great probability, bear, like the grammatical forms, a greater similarity to Æthiopic, Syriac, and Hebrew than to Arabic.

It must be an object of universal regret that, after Aden has been for so many years a British possession, and officered by men of cultivated mind, if not of erudition, nothing has been done through the

instrumentality of the English to bring to light monuments which are of such high interest for the general history of mankind. We must first have good and safe materials; and they exist, without doubt, in abundance. We are sure the Indian government will do all that is required, as soon as the subject is brought before it.

We have the best authority for stating in the mean time, that a great number of most important and well preserved inscriptions have been found near the old dyke or lake of Locman, and secured in a place where they will be safe against destruction for some years to come.

As to the modern language of the Himyar, it is still spoken in parts of South Arabia. Fresnel has given specimens of the language of the inhabitants of Mahara, the province east of Hadramaut. It is spoken in two dialects, of which he considers that of the territories of the two cities of the eastern boundary, Dzafar or Dzofar * (the most ancient Sephar of Sabæa) and Merbat, to be the purer. It appears that it is also spoken in part of Yemen proper and of Hadramaut. We are indebted for our first knowledge of this remarkable language to the indefatigable Fresnel, who calls it Ekkhili, the name by which the inhabitants call themselves (free men). The only specimen we have of it consists, however, in a fragment of a translation of the 24th chapter of Genesis, made by Krapff, and printed, together with a short glossary compiled by that same excellent missionary, at the end of Ewald's Essay. The results of both Fresnel's and Krapff's communications may be reduced to the following particulars:

1. The present language of Himyar is the modern form of that of the Himyaric inscriptions.

2. It has more in common with Æthiopic, Hebrew, and Syriac than with Arabic, as to words and grammatical forms; indeed, it is called by Arab writers Suriani, that is, Syriac.

3. The conjugation is the following, according to the specimens given by Fresnel, and some phrases contained in Krapff's Glossary (p. 313.):

* In the historical times Dafar or Dzafar is certainly to be identified as the well-known town in South Yemen; but I agree with Niebuhr the traveller, and Ritter, that the passage in Genesis x. 30., about the Joktanides (where Hazarmaveth is Hadramaut; Sheba, the Saba of the ancients), "Their dwelling was from Mesha, as thou goest unto Sephar, a mount of the east," indicates the western and eastern frontiers of the Himyarites, the mountain alluded to being the thuriferous mountain near Dzafar of Maharah.

A. *The root* Sôþ.

	*Himyaric.**	*Arabic.*	*Æthiopic.*	*Amharic.*
		I. Perfectum.		
		Singular.		
III.	*m.* sôþ	sâþa	sôþa	sôþa
	f. sôþet	sâþat	sôþat	sôþach
II.	*m.* sôk	suþta	sôka	sôþ°h
	f. sôþesh	suþti	sôþki	sôþsha
I.	sôþk	suþtu	sôþku	sôþhu
		Plural.		
III.	sôþ	sâþû'	*m.* sôþu	sôþu
			f. sôþâ	
II.	*m.* sôþkum	suþtum	sôþk°mmu	sôþâch°hu
	f. sôþken	suþtunna	sôþk°n	
I.	sôþen	suþnâ	sôþna	sôþ°n
		II. Imperfectum.		
		Singular.		
III.	*m.* yisôþ	yasûþu	y°suþ	y°sôþ
	f. tesôþ	tasûþu	t°suþ	t°sôþ
II.	*m.* tesôþ	tasûþu	t°suþ	t°sôþ
	f. tesôþ	tasûþîna	t°suþi	t°sôþi
I.	esôþ	asûþu	°suþ	°sôþ
		Plural.		
III.	*m.* yisôþ	yasûþûna	y°suþu	y°sôþu
	f. tesôþen	yasuþna	y°suþâ	
II	*m.* tesôþ	tasûþûna	t°suþu	t°sôþu
	f. tesôþen	tasuþna	t°suþa	
I.	nesôþ	nasûþu	n°suþ	°nsôþ

B. *The root* Zagad.

		I. Perfectum.		
		Singular.		
III.	*m.* zeged	zagada	zag°da	zagada
	f. zegedot	zagadat	zag°dat	zagadach
II.	*m.* zegidek	zagadta	zagadka	zagad°h
	f. zegidesh	zagadti	zagadki	zagad°sh
I.	*c.* zegidek	zagadtu	zagadku	zagadhu

* Sôþ means *he strikes*, and so does the second verb *zeged*. In this and the following example the corresponding forms are taken from the same root, although their actual existence in the other dialects cannot be proved.

Dual.

III. *m.* zegedô	zagadâ		
f. zegidetô	zagadatâ		
II. *c.* zegidetchi	zagadtumâ		*wanting*
I. *c.* zegidetehi	*wanting*		

Plural.

III. *m.* zeged	zagadû'	zag°du }	zagadu
f. zeged	zagadna	zag°dâ }	
II. *m.* zegedkum	zagadtum	zagadk°mmu }	zagadach°hu
f. zegedken	zagadtunna	zagadk°n }	
I. *c.* zegiden	zagadnâ	zagadna	zagad°n

II. IMPERFECTUM.

Singular.

III. *m.* yizegod	yazgudu	y°zag°d	y°zag°d
f. tezegod	tazgudu	t°zag°d	t°zag°d
II. *m.* tezegod	tazgudu	t°zag°d	t°zag°d
f. tezegod	tazgudîna	t°zag°di	t°zag°di
I. *c.* ezegod	azgudu	°zag°d	°zag°d

Dual.

III. *m.* yizgedô	yazgudâ[ni]		
f. tezgedô	tazgudâ[ni]		
II. *c.* tezgedô	tazgudâ[ni]		*wanting*
I. *c.* ezgedô	*wanting*		

Plural.

III. *m.* yizeged	yazgudûna	y°zag°du }	y°zag°du
f. tezgodun	yazgudna	y°zag°dâ }	
II. *m.* tezeged	tazgudûna	t°zag°du }	t°zag°du
f. tezgodun	tazgudna	t°zag°dâ }	
I. nezegod	nazgudu	n°zag°d	°nzag°d

In order to show that even this modern Himyaric contains many words foreign to the Arabic, though found in Hebrew, Syriac, or Æthiopic, we give the following specimens from Fresnel (*Journal Asiatique*, 1838, p. 513.):

phéne (Heb. panim), *face.*
pham („ pa'am), *leg.*
egeb („ 'agab), *to love.*

We will add a few words respecting the probable age of the Himyaric inscriptions. If this language, particularly that of the inscriptions from the old Saba (Mariaba, Mareb), from the neigh-

bouring dyke of Locman, and the Black Castle (Hissan Ghorab, Wellsted's discovery), bears marks of great antiquity, the history of the country increases the probability that we are here dealing with a very ancient language. It can scarcely be doubted, after the researches of Silvestre de Sacy and of Caussin de Perceval, that the destruction of the old Adite empire of Locman by Yarob the Kahtanide took place in the middle of the 8th century before Christ. This is not only warranted by the unanimous records and calculations of the Arab genealogists and historians, but also by the various points of coincidence in the foreign expeditions of some of those later sovereigns with the Sassanidan and other kings. Now, the Himyaric dynasty of the second Adites in Yemen is comprised under the name of Locman; for the duration of the reign of a thousand years being ascribed to him, is merely the mythical expression of the duration of the dynasty: we know the names of some of his successors. The great work of Arabia, the dyke north of Mareb, the ruins of which were mentioned to Niebuhr, and were seen and drawn in 1844 by Arnaud, is attributed to Locman personally.* It is of the same nature as the Lake of Mœris and probably the so-called Median wall, and was executed with the same object. It was constructed of immense square blocks of stone (part of which remain), and had sluices for letting off the water as it was required for irrigation. The Arabian authors call it El-Arim, or Sedd-Marib (the dyke of Mareb). The rupture of this dyke in the 2nd century after Christ (150—170 according to Sacy, 120 according to Perceval) formed such an epoch in the history of Yemen that it gave rise to an era called Seyl-el-Arim (the era of the rupture of the dyke). The dates, however, upon our monuments cannot be ascribed to this era; because one of Cruttenden's inscriptions of Sana (the present metropolis of Yemen), that of Abd Kulalem, bears the date of 576. Wellsted's ten lines of inscription at Hissan Ghorab bear even that of the year 604. Now, if these were dates from the rupture of the dyke, they would bring us down to the middle of the eighth century after Christ, a period when all the glory of Yemen was long gone by and its era merged in that of the Hedjra. The mention of idols also precludes the idea of so late a time. As it is im-

* Caussin de Perceval, Histoire des Arabes, i. pp. 16–18. Journal de la Soc. Asiat., Février à Mai 1845. Ewald, in Höfer's Zeitschrift, p. 304. The original plan has not yet appeared. The inscriptions from the dyke are printed in the Journal Asiat. Nos. 12—44.

possible to connect the era of the Seleucidæ with this part of the world, the only remaining supposition seems to be, that, as the rupture of the dyke constituted an era, so the erection of it had previously formed one, which naturally ended with the structure itself, and was succeeded by the other. Indeed, the three inscriptions copied by Arnaud from the remains of that wonderful structure (in Fresnel's Collection, 12—14.*) speak of the royal overseers of the dyke and its waters; the one under a king of Saba, Muhett Balaq, the other under a king Ben Dhamarati. Neither of these names is found among the kings of the later Himyaric empire; and, combining this fact with the other, it will not perhaps appear an unwarrantable assumption that the dates a least of 604 and 573 are years of Locman's era, for the duration of which we have thus documentary evidence as far as its 7th century, or down to the middle of the 5th century before Christ. Locman's era must have begun about 1750, or four centuries before the Exodus. Ewald, who refers those dates to the era of the rupture, adds, that at all events he thinks the inscriptions bear the character of high antiquity.† I think, therefore, it requires further research to see whether all those dates, of which one is of the year 30, may not belong to the Locman era. This is, in itself, the most reasonable assumption: otherwise, if the dates on the monuments in this place represent two different eras, there probably would have been some additional mark for the second. But, besides, what occasion could there be for inscriptions at these places after the destruction of the dyke?

If, then, we have a second Himyaric empire in the 18th century before our era, perhaps with monuments and inscriptions from its commencement, there is no difficulty in assuming that the first Joktanide settlement, of which this empire forms the second period, was much anterior to the Abrahamic movement, which (as I shall prove elsewhere by cogent arguments) belongs to the 28th or 29th century B. C.

* Arnaud's 3rd in Fresnel's collection. See Rödiger, p. 38. Ewald, in Höfer's Journal, p. 308.

† Ewald, in Höfer's Zeitschrift, 1846, p. 309.: "Jadeal, lieutenant of Ben Samihati, King of Saba, does homage to the temple of Almaqa (probably a goddess of the moon), day (number wanting) of the year 30. . . ."

II.

The North Arabian Settlement and the Sinaitic Inscriptions.

I. *The relative Antiquity of Arabic and Hebrew.*

We have, comparatively speaking, but few documents of the language of the Koran anterior to Mohammed, and those remains are not of a very early date, although they record remote events. All was traditional among these tribes before Mohammed, and rested upon memory. This circumstance, together with the highly intellectual and proud character of the nation and the independence of Arabian life, must account for the fact that the language, when it appears in a literature, exhibits a fulness and richness of forms which may be compared, in this sphere, to that of Sanskrit.

The following facts will suffice to show that the system of sounds is more primitive in Arabic than in Hebrew. The Comparative Tables appended to this chapter will exhibit proof of the higher antiquity of the grammatical forms.

Comparative Table of the System of Vocalization of Arabic and Hebrew.

1. Long Vowels.

The long vowel A and the diphthongs exist in Arabic in the original state, whilst Hebrew gives them in a somewhat modified form. Thus:

Arabic	â	ai	au corresponds to
Hebrew	ô (rarely â)	ê, æ (rarely aji);	ô (rarely ave)

The vowels î and û occur in the same words in both languages. The first of the above commutations, that of Arabic â, of Hebrew ô, is the most important, because the ô occurs in no part of any Arabic word. The following may serve as examples of monosyllables:

Arabic	lâ (not)	ra's (head)	ça'n (herd)
Hebrew	lô	rosh	çôn

likewise, in the first syllable of the bisyllabic derivations:

Arabic	qâtel (part.)	hâtam (seal)	'âlam (age)
Hebrew	qôtel	ḥôtām	'ôlām

and in the second syllable of the same:

Arabic	salâm (peace)	dzirâ' (arm)	'ephrâḥ (young birds)
Hebrew	shalôm	zerô'	'ephrôaḥ

in the syllable ân, added to the root to form substantives:

Arabic	soltân (ruler)	but raḥmân'
Hebrew	shiltôn	ramhân

In Hebrew the syllables âm and ân at the end of substantives are frequently found together with the later forms ôm and ôn.

2. Short Vowels.

The Arabic alphabet designates only the three original short vowels, a, i, u. These three original vowels are found in the corresponding Hebrew words only where the following consonant is doubled and the accent of the word does not fall upon it, e. g.

Arabic	kul (all)	*Hebrew*	kullâm (they all)
	sin (tooth)		shinnâm (their tooth)
	yam (sea)		yammîm (the seas)

When these syllables stand alone and are accentuated, the i and the u are transformed into e and o. The a remains unchanged. In this case the Hebrew a, e, o receive what I propose to call a *half-length*, which may be designated by ā, ē, ō. In the above cases

Arabic	kul	is changed into *Hebrew*	kōl
	sin	„	shēn
	yam	„	yām

These *half-long* vowels are changed into short ones, as soon as they lose their accents. Thus the Hebrew for

all days	is	kol-hayyāmîm
ivory	„	shen-habbîm (tooth of the elephant)
salt sea	„	jam-hammälaḥ

Lastly, even this small portion of vowel sound is very commonly impaired almost to extinction, and the uniform half-vowel placed in its

stead, which the old grammarians foolishly called *shwa-mobile* (literally, *movable rest*). This is best exemplified by such common monosyllables, as

Arabic	ba (in)	ka (as)	la (to)	wa (and)	ya (prefix of future)
Hebrew	be	ke	le	we	ye

Vestiges of the original form are still preserved in Hebrew for each of the monosyllables here mentioned. Thus bāzeh (here) and kāzeh (so) are merely compounds of ba and ka with the demonstrative pronoun zeh. Similarly, bô (in it, in him) and lô (to it, to him) are evident contractions of bā-hû and lā-hû, as is proved by the existing uncontracted form lā hem (to them). The form wa still exists in such compounds as *t*ôb wārā' (good and evil), or in wayyômer wayyiqra, &c. (he spoke, and he called, &c.). Lastly, the future prefix ya is to be found in yāqûm, yābîn (he will rise, separate).

The same will apply to innumerable cases where the so-called *shwa mobile* or half-vowel is introduced instead of a, i, u.

The following are a few instances, in the first syllable:

Arabic	sabîl (path)	'amânah (covenant)	kitâb (writing)
Hebrew	sh*e*bîl	'a*m*ânah	k*e*tâb

in the second syllable:

Arabic	qatalû	qattalû	yaqtulû-na	yoqattilû-na
Hebrew	qā*t*elû	qa*tt*elû	yiq*t*elû-n	yeqa*tt*elû-n

We subjoin a comprehensive table to show what changes the simple Arabic vowels undergo in the Hebrew formations:

Arabic	a	i	u
Hebrew	ā a, ä ă, a	ē i, e e, a	ō u, o e, o

The half-vowels, which are put in the third place, are expressed by smaller types.

A great multitude of Arabic short vowels are besides entirely thrown off and lost, particularly at the end of Hebrew words.

II. *Sinaitic Inscriptions.*

1. *The Alphabet and the Language.*

The inscriptions on the rocks surrounding the road which lead on the west side of the Sinaitic Peninsula to Mount Sinai, had already occupied the attention of Cosmos Indicopleustes, who noticed them in the earlier part of the sixth century. He could find nobody able to read the characters, and hence concluded them to be the records of the Israelites in their passage through the desert. Pococke gave some specimens of them: Niebuhr divined their contents, and scorned the idea that they could be anything but greetings and memorials of travellers in different ages. Lepsius discovered thousands of them on and round Mount Serbal which never had been observed before, and Wellsted saw the mountain which closes the Valley of Inscriptions (Wadi Mokatteb) towards the south, the Djebel Mokatteb, covered with similar ones towards the sea-side. It has been the fashion of late years, particularly among English travellers, to sentimentalize upon these records; but, since Grey's useful contributions, none of them, as far as publications go, has taken the trouble of copying them. Lepsius brought away with him more than twice the number we previously possessed, and we may soon hope to see them published and explained by Professor Tuch of Leipzig, whose treatise on those hitherto known (Zeitschrift der Deutschen Morgenländischen Gesellschaft, 14th Bd., 1849, pp. 129–215.) is conclusive as to all the essential points.

The alphabet was discovered by Eduard Beer of Leipzig, who gave an account of it in his "Inscriptiones veteres Litteris et Lingua hucusque incognitis ad Montem Sinai servatæ," (Fasc. I. Lips. 1840-1843). He proceeded to decipher them so methodically and so successfully, that Tuch, after the most searching inquiry and with fresh materials, did not discover one single letter of Beer's alphabet which required correction. The monument placed on his tomb, the characters of the Sinaitic alphabet, as found by himself, is therefore a well-deserved trophy of this self-sacrificing inquirer, who lived and died in starvation, a martyr to his zeal for truth and science.

Supposing that this alphabet would bear a resemblance to the Phœnician, the type and key of all the others, and that the language

would turn out to be a dialect of Arabic, he tested successively his decipherment by the inscriptions before him, till he satisfied himself that the result corresponded both with the principle of his research and its application. Any one, indeed, who looks at the alphabet in the juxtaposition in which we have placed it at the end of this Report, will see at once, that it bears on the face of it all the characters of a real alphabet of a Semitic dialect.

The proof of the application of this alphabet was not less encouraging. Beer found everywhere good Arabic and good sense; generally speaking, Arabic proper names. Here, however, his indisputable success terminated. His notions about the Nabathæans (a vague name) who had lived here, recording their names as Christian pilgrims to Mount Sinai, encountered from the first many doubts and objections, from Robinson, and particularly from Credner, who first pointed out in a review the true way of solving the problem. Tuch finally solved it. He found no difficulty in applying the alphabet to above two hundred inscriptions which had been brought to light long after the composer of it had sunk beneath his labours. Nor does Tuch differ from Beer as to the general explanation. Travellers writing their names and greeting the reader, and desiring to be remembered by him who passes by: such are the contents of these inscriptions read according to that key. Among the Greek inscriptions mixed up with those in Arabic, we read: "Remember Moses Samuel," the writer of another which bears the identical names (and those very peculiar ones) which frequently occur in the Arabic inscriptions read by the same key: Audos Almobakkeros, Auda Almobakr. Thus we possess a bilingual inscription which corroborates to a certain extent the correctness of an alphabet methodically discovered and successfully applied.

Three questions now arise: first, what is the language of these inscriptions? secondly, what is their probable age? thirdly, what was the occasion of the pilgrimages which seem to be recorded in them?

As to the first, it is easy to prove that it is a dialect of pure Arabic, with some peculiarities of forms.

There is the Arabic article *al*, which is not to be found in any other Semitic dialect. It is never assimilated with the following consonant, as is generally the case in Arabic. We read, for instance: *al-shakari*, not *ash-shakari*. There is also a formation of adjectives peculiar to Arabic; viz. forms like *akbaru*, great, *açlahu*, *aphtahu*

ashyabu, atammu. The same is the case with the diminutives, like *Obaydu, Horayshu, Bushayru, Guraimu,* &c.

The conjugation of the verbs offers no such prominent features, because verbs are only found as participles in these short inscriptions. We find as titles given to persons whose names are engraved upon the rock: *sha'iru,* the poet, *phârisu,* the knight, *'âlimu,* the wise man, *kâhinu,* the priest, and, very often, *zâir,* the pilgrim. Only one form of the second Arabic conjugation, the so-called Piel of the Hebrew grammarians, occurs; viz. *al-mubaqqiru,* armamentarius: and one form of the fourth form, or Hiphil: *mu'inu,* benevolent.

As to the declension of nouns, the Nominative in the proper names and titles ends in *u,* but this very restriction of a suffix once in general use proves that the language had lost the consciousness of its own laws. The same fact is proved by the circumstance of the sign of the Nominative remaining unaltered when the nouns are in the Genitive case, where the common Arabic grammar would require *i* or *a.* The Genitive ends in *i*; but here, also, a peculiarity occurs, the sign of the Genitive being only used when the *nomen regens* and the *nomen rectum* are so closely connected as to form a compound word, for instance, taym illâhi = Θεόδουλος. In common Arabic the *I* of the Genitive must be appended to every word.

Professor Tuch of Leipzig, in a recent letter to me, dated Leipzig, 29th January, 1854, adds the following interesting remarks of his, as the result of his continued researches.

1. Neither in conjugation nor in derivation are the roots containing Jod as second or third radical confounded with those which have Vau at the same place, as it is done in other dialects, but never in Arabic.

2. Where the dialect of the inscriptions differs from the North Arabic of literature, it betrays an ancient Aramaic influence. The peculiar pronoun relative *dî,* and the noun *bar* son, instead of *ben* or *ibn,* are signs of this influence. Archaistic is the feminine (termination *at* besides *a'*, which later is the common form in Arabic. The form which we find in the inscriptions continues in the mouth of the Beduines of the peninsula.

2. *The Age and Authors of the Inscriptions.*

As to the age of the inscriptions, most of the writers of those of which we possess correct copies must have been pagans. They have names like the servant of Uzza or Venus, of Menâh or Fate, of Baal, of Hobal or Saturn. They are called Germ el Ba'li or Sad el Ba'li, which means fearing Baal or the fortune of Baal.

There can scarcely be a doubt that there are among them Christian inscriptions. The frequent crosses leave no doubt about it. What is still called by ignorant people the crux ansata (the hieroglyphical sign of *ankh* life) was probably intended to represent the Christian monogram for Christ, which occurs so frequently in various forms in the sepulchral inscriptions of the ancient Christians with the A and Ω on each side of the vertical cross-beam. To this monogram and to the cross, indeed, all the Christian emblems in those inscriptions are easily reducible.

Dionysius of Alexandria, in the middle of the third century of our era, speaks already of settlements, in those villages, of Christians who had fled into the peninsula from Egypt. Antoninus in his Itinerary (beginning of seventh century, contemporary with Cosmas) relates how, at the foot of the Serbal, he and his friends were received by Egyptian Christians, who met them in procession singing: "Blessed be they who come in the name of the Lord!" Christians, therefore, did at that time make pilgrimages to the Mountain of the Law (then Serbal): why might not Jews also? why not pagans? And such pilgrims might also accord their names, as all pilgrims and travellers like to do.

Already, in the time of Moses, the peninsula was inhabited by Midianites and Amalekites. We know of Egyptian settlements in the copper mines as early as the time of the Old Empire before the Hyksos period: even in that of the Pyramids, indeed, or 2000 years before Moses. Moses himself, perhaps, speaks of such pilgrimages to Mount Serbal as of a known custom. The Amalekites occupied the western part of the peninsula as the Midianites the eastern: is it not likely that we have before us in these inscriptions, found only on the western side, the Amalekite dialect? This trace is the more precious because, according to the Arabian annals, the Amalika were the conquerors of Egypt in the very earliest times; that is to say, the principal tribe of the shepherds who conquered Egypt, and destroyed the old empire of the Pharaohs.

We will now examine a little more closely the third question: who were the writers of these inscriptions? and what was the object which brought them to this part of the peninsula? We have already anticipated the only rational answer: Pilgrims, tribes going to worship on Mount Serbal.

Diodorus and Strabo (xvi. 4. 18.) give an account of a sanctuary in this part of Arabia; their authority was Artemidorus, who copied Agatharchides of the third century before Christ. Both these were in connexion with the Ptolemies, and well-informed men. That such was the origin of the account we are now about to give, will appear by comparing Diodorus with Strabo, and it has been fully proved by Heyne in his classical dissertations on the authorities of Diodorus.

The following is the description given by this historian: "Starting from the southern promontory of the peninsula (Poseidion, now Ras Mohammed), at no great distance from it, you pass not far from a spot (he says) by the sea-side." (Strabo's expression is less stringent and more accurate.) "It is held in high estimation by the natives, on account of the advantages it affords. It is called the Palmgrove (Phoinikôn). It produces an incredible number of this fruitful tree which affords excellent enjoyment and food. The country round about has no springs of water, and is intolerably hot on account of its southern position; it is, therefore, very natural that the barbarians should have made this plantation in the midst of an inhospitable country, a sanctuary. There are many springs and rivulets at this spot, not inferior in coolness to snow. There is also an altar of solid stone, *very old, inscribed with old unknown letters.* The overseers of this grove are a man and a woman, who have the priesthood for life." Then follows a statement that the further coasts towards the north were first inhabited by the Maranæans, or Maranites, and afterwards by the Garyndeans.* They lived not at the Phoinikon, but on the coast further north: and what follows proves that they did not live at the Pharan, but went there as pilgrims.† Diodorus then relates that the neighbouring tribes held *a sacred*

* The later name I am disposed to agree with Tuch in identifying as Gharandel; but the change of Meranites into Pharanites is not only too bold, as the reading is the same in two passages of Diodorus and the corresponding account of Strabo, but it is also in contradiction with the statement of Diodorus as to the residence of the Maranites.

† Cramer upon Strabo refers to Pliny (H. N. vi. 29.) Maran, in South Arabia.

meeting or festival every fifth year in the Palmgrove, sacrificing hecatombs of camels, and carrying with them the water of those cool springs, the drinking of which was traditionally believed to restore health. The Maranites having once undertaken *a pilgrimage* to that festival, the Garyndanians took advantage of their absence to kill those whom they had left behind; and then waylaying the rest on their return extirpated them, and divided the land among them.

Now, there is but one considerable palmgrove in the peninsula, and that is in the Wady Feïran (Paran, Pharan of Scripture). There we have the perennial springs by which Moses refreshed the lingering Israelites with water from the rock: ages before the historical times had prepared the ground for this paradisiacal abundance and comfort, the ground being, according to all appearances, the sediment of an ancient lake. When St. Nilus (about 390) fled into these parts, he found Pharan a Christian town. About 120 years later, the monk Antoninus found there a Christian congregation and a chapel, the altar of which was placed upon huge stones, traditionally referred to Moses (Exod. xviii. 12.); they very probably belonged to the pagan altar of Diodorus. Pharan is a day's journey from the coast; but the western extremity of the Wady Feïran is in latitude 28° 44′, exactly one degree above the southern promontory, but a few miles from the coast, very near the sea (as is best shown in Zimmermann's great map of Palestine and the Sinaitic peninsula, in fifteen sheets (Berlin, 1850): and then leads to the king of mountains, the majestic Serbal, the Sinai of the most ancient traditions and of the most recent criticism. All the various valleys leading up to it are covered with inscriptions: one of the ascents even has artificial steps leading to the steepest point. The names of Seïr, Serbal, Sinai, Paran are found together in those magnificent verses of the Blessing of Moses and of Deborah's Song, as the place from whence the Lord came to give the law:

> "The Lord came from Sinai
> And rose up from Seïr unto them,
> He shined forth from Mount Paran."
>
> *Deuteron.* xxxiii. 2.

> "Lord, when thou wentest out from Seïr:
> When thou marchedst out of the field of Edom:
> The mountains melted from before the Lord:
> That Sinai from before the Lord God of Israel."
>
> *Judges*, v. 4. 5.

Seïr (שֵׂעִיר) might therefore be Serbal, without the idol's name (Baal).* At all events, the Serbal being thus situated, being besides the most eminent formation of the peninsula, and proving to be, from the earliest times, the object of religious awe and of pilgrimage for Semitic tribes, is it not a natural supposition that this is the mountain to which the Israelites begged, and once obtained, permission to go to sacrifice to their God? three days' journey it is said to have been from Egypt, and a three days' journey it may be styled. Whether the name of Baal form or not a part of the old, indigenous name Serbal, the place certainly was of general sanctity among the Arab tribes. It can scarcely be accidental that the great bulk of the inscriptions which surround that majestic mountain, are on the different roads leading to it: or that these inscriptions follow the paths leading to the summit, and there stop, as it were, before the majesty of that all out-topping mountain of the peninsula which, as Tuch observes, with its five peaks (all above 6000 feet above the sea), rising from the valley, might well be chosen as a symbol of the Almighty, and appear to the pagan natives as the seat of the Derari, "the resplendent," the five planets. We have two mountains called Mountain of Inscriptions, Djebel Mokatteb, south and north of Serbal. Indeed, as Ritter observes, the inscriptions ought to be called the Serbal Inscriptions.

Here, therefore, we have positive facts: records of sanctuaries frequented by the Arab tribes in the peninsula, perhaps long before Moses—and probably even from Arabia Proper: here are inscrip-

* It can be objected that the ע has disappeared in *Sor*-bal. But this abbreviation may be the consequence of the composition, with Baal. The Arabic name of the southern part of Seïr is *Sherat*, which is a younger form for *Serah* with a *Sin*, like the Hebrew. Professor Dietrich observes that *Ser* may also be from the Arabic root *Sar* (Hebr. *Shar*), which means height, chain of mountains, and occurs in Sir-jon (Hebr. Shir-jon), the name of the great Hermon. Rödiger's explanation as *Serb-Baal* is rather a doubtful one, because there is no good authority for the use of Serb as *palmgrove*. We are certainly told in the dictionary Qamus (used also by Freytag) that it has the signification of copia palmarum, but the examples given prove only that *Serb* means agmen, a multitude of gazelles, or birds, or women, and besides a track or path. On the other side, it cannot be denied that the name Serb-Baal, as Baal's palmgrove, would have been most appropriate. The only considerable palmgrove in the peninsula is stretching towards the Serbal: it is a universal custom of the Arabs, as Lepsius observes, to call the mountains after a distinctive quality of the Wadi or Wadis below them.

tions recording names of pagan Arabs, some calling themselves pilgrims.

Such being the probable antiquity of a sanctuary in these places, and of pilgrimages of Arab tribes to the same, who would deny *à priori* that some of our inscriptions might have an origin, at least, much anterior to the Ptolemaic times to which the Greek inscriptions seem to point? As yet, however, we have no proofs of it. All the inscriptions which are not Greek, are of one character; and as those which have been copied present one language, and that Arabic, and contain some pagan names found in the Arabic inscriptions; we may very reasonably consider them either as belonging to the same age or the centuries immediately preceding the Ptolemies. We have, in the Greek inscriptions, even a Roman name mixed up with the Arabic. It says: Remember Garmabalus (son of) Julius. The father's name, as it appears, Garm-al-B'ali, a true Amalekite formation.* All this, however, does not exclude that there exist still much more ancient inscriptions and monuments in the peninsula. If some curious traveller would look for Diodorus's altar, he might easily find it with its "ancient" letters in the ruins of Pharan. At all events, we shall know more about the inscription already copied when Tuch has published Lepsius' very accurate copies (made by paper casts), which contain richer materials than all that have hitherto come to light. Much, also, may be expected from the many hundred inscriptions collected by M. de Laval, now deposited at the Louvre. We trust they may both shortly appear.†

As to the Rev. C. Forster's enthusiastic and fanciful attempt to make out of these inscriptions the journals of the people of Israel on their way through the Sinaitic peninsula, an American writer, Mr. Salesbury, of Newhaven, has taken the trouble of seriously refuting it (in the first volume of the American Ethnological Journal). Science can only deeply deplore such unwarranted encroachments of wild imagination and crude conjecture into the sacred domains of history. Did we know nothing of Beer's alphabet (as the author, indeed, confesses that he did not when he thus gave vent to his fancy),

* I owe this fact to the kind communication from Tuch, to which I have alluded.

† I learn from Tuch that M. de Laval has announced his intention of sending him those inscriptions. It would be desirable that all English travellers who are in possession of good copies not yet published, should do the same. A comprehensive, faithful, and learned publication may thus be secured.

and could not we by means of that alphabet read intelligible names and words in a known language, such an alphabet as that of Mr. Forster, constructed as it is upon a very loose and fanciful resemblance between some of the characters and the modern Hebrew characters (the Babylonian letters of Chaldee, adopted only after the exile by the Jews, according to Jewish and Christian tradition) could have no claim to appear before the world under any other title than that of a learned hallucination. Again, if such an unwarranted alphabet could be admitted for a moment, the absolute nonsense which the poor inscriptions are made to produce, when read according to that false key, would be its strongest refutation, the sentences, as made out by this fancy-alphabet, being as devoid of grammar as they are of any but an imaginary meaning. If, finally, such nonsense could be considered in any other light than as a forcible proof of the absolute hollowness of the whole scheme, a glance at the Hebrew of Moses would at once involve us in the dilemma: either that we do not possess a single syllable of Moses or a single genuine text in the Old Testament, or that Mr. Forster's pretended language is not Hebrew, not the language of the children of Israel at the time of the Exodus. If Mr. Forster's language had any existence except in his own brain, it would prove that the Hebrew of that time was a branch of the Chinese language, that is to say, an unknown tongue, in the state represented by the Chinese, without grammatical forms of any kind.

I have said nothing about Mr. Forster's former Hîmyaric dreams, because I hope he has abandoned them, and because they are forgotten. But as his recent attempt to ignore what science has gained by the sweat of the brow of its true disciples, to despise method and learning in a domain intimately connected with our religion and our faith, and to throw discredit upon honest enquirers, it would have been a dereliction of a public duty not to have recorded here my solemn protest against such relapses into a strain of uncritical conjectures, which, if not severely repudiated, must render all philological researches ridiculous in the eyes of the public.

D.

THE CANAANITIC SETTLEMENT,

OR THE

HEBREW AND PHŒNICIAN.

1. *Origin of Hebrew and Primitive Roots.*

THE next stage of development of which monuments are extant, is the language which derives its name from Eber, the father of Peleg and Joktan, grandson of Arpakhsad (Arrapachitis). We may safely suppose him (as his name indicates) to have crossed the Euphrates, and settled in that part of Chaldæa which we may call Upper Mesopotamia. We hear of this tribe moving from Ur in Chaldæa; down to Padan-Aram (the plain of Aram, Middle Mesopotamia), till Abraham resolved to settle in Palestine, where he found the kindred Canaanite tribes themselves in different ranges of older and more recent settlers. This cannot have happened later than the 28th century before Christ, as the chronology of Joseph proves; whose great-grandfather Abraham was, as certainly as Jacob (whom he buried at Hebron and whose tomb may be extant) was his father. Ewald has established the historical character of the account of the warfare of the four kings against the five, contained in the 14th chapter of Genesis; and the Egyptian researches dispel the last doubts as to the existence of the art of writing, and of historical records, long prior to the time of Moses and the Exodus, or the 14th century before Christ. We have, therefore, at all events in the Decalogue, the language of Moses, supposing even that the earlier records have been transmitted to us in the orthography of the Mosaic or Davidic times. The link is carried on through the age of the Judges by the Song of Deborah and similar compositions. From the time of David we have an uninterrupted line of Hebrew compositions down to the Persian epoch, or the age of Haggai and Malachi, and the Kohelet or Ecclesiastes. We distinguish, in this chain of almost a thousand years, the different epochs, and even the dialectic difference of the northern (or Ephraimitic) and the southern or, properly speaking, Judaic tongue. Finally, we have, in

the pronominal formations, and also in some proper names, reaching up to the most primitive age and traditions, vestiges of forms which once existed in Hebrew, but which have disappeared in the historical times, and are only preserved in the sacred language of the Chaldeans.

It is known, even to those who are but superficially acquainted with Hebrew, that it is much less rich in grammatical forms than the Arabic. As to its relation to the Gheez, or the African deposit of the Himyaric movement, it is not so easy to reduce the difference between them to historical formulas. The Ethiopic undoubtedly has preserved forms which we do not yet find in the Asiatic; but I think this is not to be explained by supposing the original idiom of Chaldæan to be a more developed and therefore younger language than Hebrew, at the period when the Himyaric, of which the Ethiopic is the deposit, branched off from the Chaldæan stock. On the contrary, I think that phenomenon must be accounted for by the Hebrew having lost many of its forms. They were dropped in the course of the settlement before literature fixed the written language in that state in which we know it during a period of about a thousand years' development.

Be this as it may, the Hebrew affords us, at all events, monuments of much higher antiquity than either Arabic or Ethiopic. The Hebrew nation, besides, is that which of all the Semitic tribes has been most conservative and humanitarian in its recollections. Its general traditions are infinitely better preserved than those of any other nation in the world. We may, therefore, also assume the same character for its language. This, however, does not preclude its having undergone the natural process of all developments, the loss of forms after a certain period. And certainly, although the Hebrew dictionary is still poorer, compared with the Arabic, than its grammar, we find in it more ancient formations than in any other Semitic dialect.

The Semitic roots are uniformly triliteral, and therefore bisyllabic. The Egyptian monuments, however, as well as the cognate Iranian roots, suffice to prove that this form is only the consequence of a comparatively late and peculiar organic development. But I believe we can prove still more directly the original monosyllabic state of the Hebrew roots. We have a considerable number of primitive monosyllabic Hebrew nouns, expressing the most primitive and original perceptions and relations of mankind. We meet, likewise, with the same character in the pronouns, if we decompose them. The fol-

lowing tables show this at once. As to the first, we find that few of these monosyllabic nouns have any correspondence in the dialects. These have but few nouns of a decided primitive monosyllabic nature; that is to say, such monosyllables as are not simply the abbreviations of a triliteral root.

As to the Table of Pronouns, the objection may, of course, be urged, that, these stems being only the wrecks of once substantial or real, not formal or merely formative words, they may have existed previously in a triliteral form. But then we cannot prove this to be the case, even in one single instance. We find, moreover, some of these same monosyllables already in Egyptian. And why should some pronouns have preserved their triliteral character, and the others not, if all were originally triliteral? The best proof, I believe, will be found in the tables themselves. That of the pronominal stems has been made, by Dr. Boetticher, a more complete comparative review than those of Fürst and of Hupfeld.

The more ancient grammarians assumed triliteral roots in all cases, and this theory has been revived to a certain degree by Rödiger. In adopting such a theory, we must take great care not to hurry to a wrong conclusion. Suppose we can make it probable that there exists a correspondence between a monosyllabic noun and a triliteral verbal root, the question arises, whether the qualitative idea expressed by this root is not a secondary, more developed form of the primitive biliteral root. If we allow primitive biliteral roots of verbs at all, we shall have to consider the monosyllabic noun as a relic of this primitive formation, and not as the wreck of a triliteral root. It is difficult to suppose a systematic mutilation of roots in nouns expressing a substance. Verbs ending in a soft spirant (*a* or *h*) have exceptionally an abbreviation in the future tense. Such mutilations may occur in a pronoun, which is in itself a particle in the wider sense of the word, as it no longer represents a substance, but not so in a noun.

The whole controversy, therefore, is concentrated in the question as to the primitive existence of biliteral or monosyllabic verbal roots in general. Fürst and Delitzsch*, having taken up this question in favour of the existence of such roots, endeavoured to explain the triliteral roots now extant mostly as compositions of two roots, and in this process were obliged sometimes to invent roots of which there are only traces in Sanskrit, Greek, or Latin. But, before them,

* Fürst, Concordantia Hebraïca, Lep. 1840, fol. Delitzsch, Jesurun, 1838.

Hupfeld* had already pointed out the right way by considering the triliteral roots as the renewal of that same formative process which had produced, in a more primitive stage of development, the biliteral roots. Professor Franz Dietrich, of the University of Marburg, thinks that the whole formation of triliteral roots may be explained as a derivation from the biliteral by a process analogous to the later means of derivation, but a more powerful one. In two works† (1844 and 1846) he has prepared the way for a deeper investigation both into the formation of the Hebrew roots themselves, and into the history of the signification of the words derived from them.

The condensed essay by Dr. Paul Boetticher, in the Appendix, represents, on the whole, the result of Professor Dietrich's researches.

This essay proves that we certainly cannot set up a formula by which we can find infallibly the primitive biliteral form for every triliteral root.‡ Indeed, there must exist, and do exist, triliteral forms which cannot be reduced to a biliteral root. But it proves besides, first, that this tendency of strengthening and modifying a biliteral root, by the addition of an auxiliary consonant, runs through the whole flexional as well as lexicographical system of the language; and, secondly, that we can determine which letters may or may not serve as auxiliary sounds, and that we can show that the number of these modifying sounds is strictly limited.

Comparative philology leads irresistibly to the assumption that the Semitic languages started from biliteral roots. Egyptian is still more decisive on this point than Sanskrit.

The only method to be pursued, therefore, appears to me to be this. We have first to endeavour to establish the primitive, substantial meaning of a given root: then to look for its corresponding root in the Indo-Germanic languages, and therefore principally in Egyptian and Sanskrit, but strictly according to the rules of analogy of sound.

I have no doubt that, if this method be followed up, we shall arrive in an overwhelming number of cases at a perfect correspondence between the two great dialects of primitive humanity.

* Hupfeld, De Emendanda Ratione Lexicographiæ, 1830. Also in Exercitationes Æthiopicæ, published some years earlier.

† Dietrich, Abhandlungen für Semitische Wortforschung, 1844. Abhandlungen zur Hebräischen Grammatik, 1846.

‡ See in the Appendix B.

2. *The Relation of the Phœnician and Punic to the Hebrew.*

The language of the Canaanites whom Abraham found already settled in Palestine, and among whose cities Sidon, the Phœnician metropolis, stands preeminent, and Abraham's own tongue, that of the Hibri or Hebrews, are both called Canaanitic idioms. In Gen. ix. 8., and x. 6—18., Canaan, the son of Kham (the Canaanites having come out, as a settling tribe, from Lower Egypt at a very early period), is called the father of Sidon and Khet (the Hittites, or the Kheta of the Egyptian monuments). Sidon is Kham's firstborn; the later political origin of Tyrus is also known from other accounts. Now, in Isaiah (xix. 18.) we find the Hebrew itself called the "language of Canaan." Both languages must therefore have differed only as dialects.

Such indeed is the relation of Hebrew and Canaanitic as the monuments of the latter represent it to us. Phœnician may be called a tissue, in which Hebrew forms the woof and Syrian the warp; and this Aramæan element is particularly visible in the Punic. The classical work of Gesenius (Inscriptiones Phœniciæ) illustrates this definition from one end to the other.

We shall limit ourselves to exemplifying it by examples from the roots, from the system of sounds, and from the forms of derivation and flexion.

The *roots* of a great number of Canaanitic proper nouns are clearly traced in Hebrew. Thus, Abi-melekh (*pater regis*), 'Adoni-bezek (*dominus Bezeq;* the name of this Canaanitic city of Bezeq is again cognate with the Hebrew root bāzāq, *fulgur*), 'Adoni-zedeq (*dominus justitiæ*), 'Eshkol (*uva*), Mamre' (*robur;* compare Hebr. verb mārā', *robustum esse*), Melchi-zedeq (*rex justitiæ*). The suffix -i, used in many of these compound nouns at the end of the first word, is found only in the Hebrew language.

In the *system of sounds* also, the Canaanitic remains can be proved to follow the same rules as the Hebrew. According to these rules (as will be seen from the Comparative Tables below, p. 246.) the *Hebrew* ç, sh, z, correspond to the *Arabic* ṯs, ṯs, dz, whilst the *Aramaic* idioms invariably substitute ṯ, t, d. We have an instance of this change in the Canaanitic name of a district, Bāshan, as found at the time of the Jewish conquest. The *sh* in this name was transformed into t in the later Syriac period, as we see from Βαταναία in Josephus

and from its corresponding Chaldee and Syriac spelling; and in Arabic writers the same district is called Batsanieh. A similar system of changes can be traced in the indigenous Canaanitic name of that city, called Dan by the Hebrews, which lay to the north of Palestine. This city "formerly" (Judges, xviii. 29.) was called Lajish: in Aramaic this final consonant became t, Lait; and in Arabic it is spelt Laits (*leo*). The city-name of Ashterôt-Karnajim (Astarte's Horned) would have been pronounced Atergat-Karnān in Aramaic (as indeed we find it in the Maccabees, Ἀτεργατίς). The same rule applies to the name of Tyrus, which is Ṭôr in Syriac and Chaldee, but Çôr in Canaanitic, Hebrew, and Phœnician.

The *derivative form* -ôn is common to Canaanitic and to Hebrew, whilst the Aramaic and Arabic languages invariably have -ân. The name of Ephrôn, the Hittite, may serve as an example; also the city-names of Jerîchô (Jerêchô), 'Akkô, &c., which are abbreviated from Jerîchôn, 'Akkôn, &c., terminate in â in Arabic. Besides these affixes, there exist changes within the root, where the Hebrew and Canaanitic ô stands opposed to the Arabic and Aramaic â; thus the friend and ally of Abraham, Eshkôl, is called 'Etskâl in Arabic.

Finally, the principal *forms of flexion* are the same in Canaanitic as in Hebrew. Thus the

Plur masc. is -îm, *Heb.* and *Can.*; -îna, *Arab.*; în, *Aram.*: for instance, 'Emeq-hassidîm, the valley of Sodom and Gomorra.

Plur. fem. is -ôt, *Hebr.* and *Can.*; -ât, *Arab.* and *Aram.*

Dual: -ajim, *Hebr.* and *Can.*; -aini, *Arab.*; -ân, *Aram.* (a rare form).

Ashterôt-Karnajim is an instance which exhibits both the latter forms in Canaanitic.*

* Professor Dietrich has pointed out to me, as exceptions, two highly interesting cases, where the true Canaanitic dual appears to have been supplanted by the Aramaic form in the *northern* districts of Canaan: Dôtajin, Dôtân (*duo cisternæ*), to the north of Samaria; and Kartân, in the district inhabited by the tribe of Naphthali. The latter name, Kartân, has its corresponding genuine Canaanitic termination in the city of Kirjatajim (*duplex oppidum*) in Moab, and in the district inhabited by the tribe of Reuben.

E.

COMPARATIVE TABLES,

SHOWING

THE RELATION OF THE SEMITIC IDIOMS AMONG EACH OTHER.

I.

General Table of the System of Sounds.

Arabic	d	dz,	t	ts,	*t*	*ts*	z	s	sh	ç	·ç
Hebrew	d	z,	t	th,	*t*	ç	z	's sh	„ s	ç	ç
Aramæan	d	d,	t	t,	*t*	*t*	z	s sh	s	ç	.

II.

Strictly Monosyllabic Nouns in Hebrew.

âb *father*
ah *brother*
aḃ *necromant*
êm *mother*
êsh *fire*
ôsh *fundament*
ēt *ploughraker*
bēn *son*
bar *corn*
dōḃ *bear*
dāg *fish*
dām *blood*
har *mountain* (later harar)
ḥām *father-in-law*
ḥaph *pure*
ḥaph *little children*
yād *hand*
yām *sea*
kaph *hand*
kêph *rock*
kar *lamb*
lēb *heart* (later lebāb)
lōg *measure for liquids*
laḥ *fresh*
mad *garment*
mas *tribute*
met *man*
nâ *fresh, crude*
nēd *heap*
sal *willow-twig*
sam *medicine*
saph *basin, threshold*
'ēz *goat*
'ēç *wood*
pag *unripe fig*
pāz *gold*
paḥ *snare*
peh *mouth*
par *heifer*
çad *side*
qēn *nest*
qash *stubble*
sar *prince*
shēm *name*
shēn *tooth*
saq *sack,*
tēl *hill.*

From the above list all words are excluded which, although monosyllables, and not reducible, without arbitrary assumptions, to an existing triliteral verbal root, still are written with three letters, the middle one being an Aleph, Vau, or Jod. Such are the following words:

gôy *nation* gay *valley* hîn *a measure for liquids*

and others. It is highly probable that some at least of these are only written with Aleph, Vau, or Jod by mistake, in order to express that the syllable is long; but it is impossible to prove this in a given case. It is to be remarked that most of these monosyllabic words are not found in the other dialects. As to the monosyllable pronouns, they are found in the General Table of Pronominal Terms. Of the particles, the expression of the negation *lê* only is monosyllabic.

III.

Personal Pronouns.

	Christ. Aram.	*Jew. Aram.*	*Hebrew.*	*Æthiopic.*	*Arabic.*
I.	eno,	ʿnâ,	ʿnî, ānōkî,	ana,	an'a.
II. *mas.*	ant,	ant, antâh,	attâ, attâh,	anta,	anta.
fem.	anty,	anti, ant,	atty, att,	anti,	anti.
III. *mas.*	hû,	hû,	hû' (comm.),		huwa.
fem.	hî,	hî,	hî',		hiya.
mas.				we'tu,	
fem.				ye'ti,	
Dual III.					humâ.
II.					antumâ.
Plural I.		ʿnû, ʿnaḥnâ, naḥnâ,	ʿnû. ʿnaḥnu, naḥnu,	nᵉḥna,	naḥnu.
	hᵉnan. anaḥnan.*				
		ʿnân,			
II. *mas.*	antûn,	antûn,	attem,	antᵉmu,	antum.
fem.	anteyn,	antêyn,	atten,	antᵉn.	antunna.
III. *mas.*		himmô, himmôn,	hêm, hêmmâh,	[homu †], ʿmun-tu.	humu, hum.
fem.			hên, hênnâh.	[hon†].	hunna

* Occurring in the Syriac MSS. brought from the Libyan Desert to the British Museum.

† Only used with the preposition L (lumu *αὐτοῖς*), and as suffixes.

Christ. Aram.	*Jewish Aram.*	*Hebrew.*	*Æthiopic.*	*Arabic.*
mas. enûn,	innûn.			
fem. eneyn,	innêyn,			
	hᵉnân.			
mas.			we'tomu.	
fem.			we'tôn.	

IV.

Demonstrative Pronouns and Particles formed out of the Dental Media.

Christ. Aram.	*Jewish Aram.*	*Hebrew.*	*Æthiopic.*	*Arabic.*
	dâ *αὕτη,*		zâ *αὕτη,*	ḍâ *οὗτος.*
	dí *ὅs* and *genit.*			ḍî *αὕτη.*
		zû *οὗτος, αὕτη ὅs, ἥ.*		ḍú *ὅ τοῦ.*
			za *relat. genit.*	
dᵉ, *relat. genit.*	dᵉ *relat. genit.*		zᵉ *οὗτος.*	
		zeh *οὗτος,*		ḍihi, ḍihî, *αὕτη.*
		zôh *αὕτη.*		
		zô't *αὕτη,*	zâti *αὕτη,*	ḍâ't^{un} *ἡ τοῦ, οὐσία.*
		day *τὸ ὑπάρχον.*		
				ḍayta *οὗτως.*
	dêyn *οὗτος.*			
	dᵉnâ *αὕτη.*			
			zᵉntu *οὗτος.*	
	dêyk, *οὗτος,*		zᵉku *οὗτος,*	dâka *οὗτος.*
	ᵃzay *τότε,*	âz *τότε,*	ᵉda *ὁπουδήποτε,*	iḍ, iḍâ *τότε ὅτε.*
aydo *τίς γυνὴ*; *αὕτη.*				
hode (hodo) *αὕτη,*				hâḍâ *αὗτος.*
				hâḍihi *αὕτη.*
	ᵉdayin *τότε.*			
hoyđeyn *τότε,*	hêydêyn *τότε.*			
hoydeyk *τότε.*				

V.

Demonstrative Pronouns and Particles formed out of the Dental Tenuis.

Christ. Aram.	*Jewish Aram.*	*Hebrew.*	*Æthiopic.*	*Arabic.*
				tâ *αὕτη.*
			tî *enclit.*	tî *αὕτη*
			tu *enclit.*	

Christ. Aram.	*Jewish Aram.*	*Hebrew.*	*Æthiopic.*	*Arabic.*
		she, sha = *genit.*		
				tihî αὕτη.
		shay τι.		
	tām ἐκεῖ,	shām ἐκεῖ,		ṭamma ἐκεῖ.
				ṭumma τότε.
tammon ἐκεῖ.				
t°non ἔνθα.				
			aitê ποῦ.	
		esh (*Phœn.*) *genit.*		
		asher ὅς, ἥ, ὅ.		mâtay πότε.
	ematy πότε ;	êymatay πότε.		

VI.

Pronouns formed out of the Guttural Tenuis.

Christ. Aram.	*Jewish Aram.*	*Hebrew.*	*Æthiopic.*	*Arabic.*
kô οὕτως,	kâ οὕτως.			
		kî γάρ.		
			ka ὡς,	ka ὡς.
k° ὡς,	k° ὡς,	k° ὡς.		
		kôh οὕτως.		
kay πῶς,				kay ὅπως.
				kayta οὕτως.
ken οὕτως,	kên οὕτως,	kên οὕτως.		
	kâk οὕτως,			
		ak μονονουχί.		
ayk πῶς ὡς,	êyk πῶς ὡς.			
	hêyk οὕτως.			
	hâkâ οὕτως.			
aykô' πῶς,		êykâh πῶς;		
		êykôh πῶς;		
aykan πῶς.				
kokan οὕτως.				
			kaḥa οὕτως.	
			kaḥak οὕτως.	
[kût]				
k°vot				
ak°vot } οὕτως.				
hok°vot				

VII.

Particles formed out of the Labial Tenuis.

Christ. Aram.	*Hebrew.*	*Æthiopic.*	*Arabic.*
	pô ἐκεῖ.		
	pô'.		
	pôh.		
			pha καὶ (when the sentence has a new subject).
		°phô πῶς.	
	êphô ποῦ.		
oph καὶ,	aph καὶ οὐκοῦν.		

VIII.

Pronouns and Particles formed out of the Simplest Aspiration Aleph.

Christ. Aram.	*Jewish Aram.*	*Hebrew.*	*Æthiopic.*	*Arabic.*
a' article (postponed),	â' article (postponed).			
		ay ποῦ;	ay τίς;	ayy^un πότερος.
ayno τίς;				
aydo τίς γυνή;				
enûn αὐτοί,	innôn αὐτοί,			an anna εἰ ὅτι.
eneyn αὐταί,	innêyn αὐταί,			in inna εἰ ὅτι.
		im ρἰ,	°m = Hebrew *im f. min.*	am εἰ.
				al ὁ, ἡ, τό.
		ēl αὐτοί.		
	°lû ἰδοῦ!			ilâ, ulay, ûlâi αὐτοί.
		ēlleh οὗτοι.		
			°llâ ἐκεῖναι,	alla-dî ὅστις.
			°llû ἐκεῖνοι.	
	illêyn ἐκεῖνοι,		°llân-tu ἐκεῖναι.	
			°llôn-tu ἐκεῖνοι.	
	illêyk ἐκεῖνοι.			
ayleyn.				
	°rû ἰδοὺ.			
	°rê ὅτι γάρ.			
	°rûm ὅτι γάρ.			
mo τί;	mâ τί;			mâ τί;

Christ. Aram.	*Jew. Aram.*	*Hebrew.*	*Æthiopic.*	*Arabic.*
		mî τίς;	mi τί; πῶς;	
		mâli τί;		
mon τίς;				
mûn τί;			man τίς;	man τίς;
man τίς;				

IX.

Pronouns and Particles formed out of the Stronger Aspirate He.

Christ. Aram.	*Jewish Aram.*	*Hebrew.*	*Æthiopic.*	*Arabic.*
hô αὐτός,	hâ ἰδού,			hâ ἰδού.
hû αὐτός,	hû αὐτός,	hû' αὐτός,		huwa αὐτός.
hi αὐτή,	hi αὐτή,	hî' αὐτή,		hiya αὐτή.
		hâ, ha (article),		
		h[a] (interrogat. particle).		
hon ἐκεῖνος,				[hâna] in hâ-naḍâ.
[hen],	hên ἰδοῦ [τοῦτο],	hēn ἰδοῦ, αὐταί.		
		himmêh ἰδού.		
		hēnnâh αὐταί.		
				hanâ δεῦρο.
				hunâ δεῦρο.
henûn αὐτοί,	hinnôn αὐτοί.			
henêyn αὐταί,	hinnêyn αὐτοί.			
hûn suffix III. Plur.			hôn αὐταί.	
heyn suffix ditto, Fem.				
		hēm αὐτοί.		
	himmô αὐταί,	hēmmâh αὐτοί,	hômu αὐτοί.	
	hal δεῦρο.			
	hâlâ, οὗτος,	hâl[e]âh δεῦρο.		
holeyn οὗτοι,	hâlêyn, οὗτοι.			
		hallâ-zeh οὗτοσί.		
		hallâ-z οὗτοσί.		
		h[e]lom δεῦρο,		halumma δεῦρο.
[hôr]				
hôrkô ἐνταῦθα.				
hortammon ἐκεῖ.				

X.

The Simple Conjugation.

(Verb QBL, to live.)

PERFECT.

	Aramæan.	*Hebrew.*	*Æthiopic.*	*Arabic.*
III. *m.*	q°bal,	qābal,	qab°la,	qabala.
f.	qeblat,	qābelâh,	qab°lat,	qabalat.
II. *m.*	q°balt.	qābaltâ,	qabalka,	qabalta.
f.	q°balty,	qābalt,	qabalki,	qabalti.
I.	qeblet,	qābalti,	qabalku,	qabaltu.
				qabalâ, Dual, III. *m.*
				qabalatâ, *f.*
				qabaltumâ, II.
Plu. *m.*	q°balw,	qāb°lû,	qab°lû,	qabalû'.
f.	q°baly,-leyn,		qab°lâ,	qabalna.
II. *m.*	q°baltûn,	q°baltem,	qabalk°mmu,	qabaltum.
f.	q°balteyn,	q°balten,	qabalk°n,	qabaltunna.
I.	q°baln,-lnan,	qābalnu,	qabalna,	qabalnâ.

IMPERFECT FUTURE TENSE.

III. *m.*	neqbûl,	yiqbōl,	y°qb°l,	yaqbulu.
f.	teqbûl,-ly,	tiqbōl,	t°qb°l,	taqbulu.
II. *m.*	teqbûl,	tiqbōl,	t°qb°l,	taqbulu.
f.	teqb°lîn,	tiqb°lî,	t°qb°li,	taqbulîna.
I.	eqbûl,	eqbōl,	°qb°l,	aqbulu.
				yaqbulâni, Dual. III.
				taqbulâni, *f.* III.
				taqbulâni, II.
III. *m.*	neqb°lûn,	yiqb°lû,	y°qb°lu,	yaqbulûna.
f.	neqb°lon,	tiqbōlnâh,	y°qb°lâ,	yaqbulna.
II. *m.*	teqb°lûn,	tiqb°lû,	t°qb°lu,	taqbulûna.
f.	teqb°lon,	tiqbōlnâh,	t°qb°lâ,	taqbulna.
I.	neqbûl,	niqbōl,	n°qb°l,	naqbulu.

XI.

The Forms of Conjugation.

Arabic.	*Æthiopic.*	*Aramæan.*	*Hebrew.*
I. qabala,	qabᵉla,	qᵉbal,	qābal (conj. Kal).
II. qabbala,	qabbala,	qabbel,	qibbēl (conj. Piel, with passive Pual).
III. qâbala,	qâbala.		
IV. aqbala,	aqbala,	aqbel,	hiqbîl (conj. Hiphil, with passive Hophal).
V. taqabbala,	taqabbala,	etqabbal,	hitqabbēl (conj. Hithpael).
VI. taqâbala,	taqâbala,		
VII. inqabala,			niqbal (conj. Niphal, medium and pass.).
VIII. iqtabala,			
IX. iqballa,			
X. istaqbala,		eshtaqbal.	
XI. iqbâlla,			
XII.	aqabbala.		
XIII.	taqabᵉla,	etqᵉbal.	
XIV.	ᵉstagabbala.		
XV.		shaqbel.	
XVI.		taqbal.	
XVII.		ettaqbal.	

XII.

Comparative Table of the forms of Conjugations, according to the signification.

The Arabic language forms a passive out of every one of its eleven conjugations; whereas, in Hebrew, only two pure passive forms occur, viz., Hophal and Pual.

A. Causatives, 4. 12. 15. 16.
B. Intensives, 2. 3. 9. 11.
C. Reflexives, 5. 6. 8. 13. 17.
D. Medial, 7.
E. Desiderative, 10. 14.

F.

THE SEMITIC ALPHABETS.

If we discard the cuneiform inscriptions, all other alphabets of the Semites (and through the Iranians of all European nations) are reducible to the Phenician.

As to the cuneiform alphabet, it is evidently a mere conventional monumental character, invented in a country were the people used bricks instead of stones. Mr. James Nasmyth, of Manchester, was the first who made this observation and showed the very mechanism of impressing those characters. Indeed, if one takes a piece of wood, of the length of five or six inches, cut as an equilateral triangle (thus, Δ), and applies it, beginning with the top, to a piece of clay, it produces exactly the lines of which the cuneiform inscriptions consist. Mr. Nasmyth has even shown that some Babylonian bricks furnish by the remains of *pentimenti* the direct proof that the letters were impressed in this manner. Layard gives in his first Nineveh publication (ii. p. 181), this same instrument placed upon an altar.

This fact proves that cuneiform writing must have been first used in Lower Babylonia where all building is carried on by bricks, and not in Assyria, rich in quarries.

For purposes of literature the Babylonians must have had a cursive character; there are, indeed, traces of such a one, and Klaproth imagined he could discover in them the most ancient forms of Semitic writing. But I cannot see in them anything but a cursive cuneiform character. One of the most authentic documents is that given by Layard, in his Nineveh and its Remains (vol. iv. p. 179). We have here twenty-six characters, of which five occur twice, three even four times, taking fifteen out of the twenty-six; the remaining eleven occur only once, which in itself is a sign that we have not an alphabetic, but a mixed phonetic and ideographic writing before us; besides, scarcely any have a resemblance to the Phœnician characters, whereas two are unmistakeably cuneiform signs, and almost all the others reducible only to the same origin.

The only plausible solution of this problem seems to me to be

presented by our assumption that the historical Chaldee language (the two Aramaean dialects) had a very early root in the vulgar tongue of Babylonia, and that to this tongue belonged an alphabet and a system of writing analogous to the other idioms of historical Semitism. The inscriptions found in a Babylonian tomb, among other ancient remains, on a sheet of lead, which we publish in the Appendix, seems to me a specimen of that language and of that writing. At all events, it is an important addition to the history of that alphabet which we call the Phœnician.

As we possess now, through the Egyptian facts, a perfect knowledge of the syllabic and alphabetic elements in the most ancient, ante-Noachian phasis of Semitism, and as we know enough of the syllabarium of that Chaldee language which represents the next phasis, the Babylonian of the cuneiform inscriptions, it becomes the duty of comparative historical philology to combine these new materials, and to bring them to bear upon the origin and history of the historical alphabets of the Shemites, which hitherto have been considered without them. We thus are obliged to enter into one of the most interesting, but also most complicated researches of Semitic and classical philology — the origin and history of what we must call our own alphabet; I mean to speak of the Phœnician alphabet, from which all alphabets of the Hellenic and Italic nations of antiquity are derived, and which shows itself in Lycia and Phrygia either in an identical shape or as the basis of a more developed peculiar alphabet. The classical work of Kopp on the alphabetic signs*, although now superannuated in some parts, and defective, is still the foundation of modern critical palæography. The researches of Ekhel, in his "Doctrina Numerum;" of Boekh, in the "Corpus Inscriptionum;" of Otfried Müller, in his "Orchomenos," and in his "Etruscans;" and lastly, of Franz in his "Epigraphice," have delivered us for ever from the loose conjectures and in part imaginary speculations of the eighteenth century. The foundations of a solid classical palæography have been laid for ever; the problem now is to consolidate and complete the work by trying to reconstruct the primitive history of mankind upon them. As to the field of Semitic philology, the basis of historical criticism will be found in Gesenius's Classical History of the Hebrew Language and Writing; and in the most learned of his works, the "Monumenta

* Bilder und Schrift, 2 vols. 8vo., 1820.

Phœniciæ," followed and connected as his researches have been by Hupfeld, Ewald, and Rödiger. The Runic researches themselves have been rescued from the dreams and fictions of provincial lucubrations. Thanks to the philological spirit of Mühlenhoff, of W. Dietrich, and G. W. Dasent, we now know that, of the sixteen old Runes (to which the four with points were added), the greatest part, perhaps all with the exception of B, stand upon an original basis of Asiatic, probably East Asiatic, growth, and represent rude hieroglyphics of objects, the words for which began with the letters in question.

The genius of Lepsius shines brightly also in the sphere of general palæography, both by his researches on the formation of the Devanagari alphabet of Sanskrit, and by his Essay "On the Order and Connexion of the Semitic, Indian, Old Persian, Old Egyptian, and Ethiopic Alphabets," read in the Royal Academy of Berlin, in 1835, and published in its Memoirs of that year, and also as a separate book. His researches have the great advantage of being based upon a physiological examination of the organs and elements of speech, and conducted with a comprehensive spirit and a peculiar tact for finding out the genetic element or the principle of development. This tact is not less necessary in the researches of comparative palæography than in the field of comparative philology. Every system of writing, as it appears fixed in writing, and as it establishes itself as a traditional national heirloom, appears, to the nation which uses it, as an independent creation, and is interpreted and systematized according to the genius of the language which it was itself the first means of fixing. But from the historical point of view it appears quite different. Your modern alphabet rests upon that of the ancient language; and that came from another nation, even, originally, from a quite different stock. We still write Phœnician letters at London, Paris, and Berlin. And, after all, may the most ancient alphabet itself not be the improvement of a syllabarium? and was phonetism, even in that least abstract form, anything but a scion of hieroglyphic writing? Take care not to confound: do not lose sight of the peculiarities of nations and ages; but do not forget either that what is fixed now must have once been floating and moveable, and that what is fixed may have been so by a misunderstanding of the primitive structure.

We are right in laughing at dreams and fictions of priests, and at the hallucinations of learned men, as to the origin of alphabets,

from the Chinese fables respecting Fo and the tortoise, and priests of Thoth, who know that Hermes Thrice Great had brought the sacred signs from heaven, down to Seyffert, who has found out that our alphabet was formed by Noah on the 7th September of the year 3446 B.C. upon the zodiacus and the constellation of the seven planets. But certainly we should not be justified in rejecting a hypothesis which finds thought at the bottom of conventionalism, and ancient reason behind modern blunder. I confess, wherever I discern reason, I have a difficulty not to suppose creative thought anterior to later confusion — not a speculative theory, but the reproductive power of inventive common sense beholding reality rationally and practically. All inventions come from individual thought, based upon the common stock of national and human instinct. The light spread by discoveries which change the face of the earth do not proceed from abstract theories or mystical hallucinations, but from the bright light of productive thought turned upon reality, and is kindled at the celestial fire which has its Promethean hearth in the human breast.

We know the extent and order of the Phœnician alphabet through the alphabetic psalms. Although none of the psalms arranged according to our alphabet can be placed higher than the age of Jeremiah, or the time of Nebukadnezar, we have every reason to believe that this order is of the highest antiquity. The old Ionian alphabet has the twenty-two letters of the Phœnician and Hebrew alphabet, preserving, in the form and name of the numeral signs, those letters which the genius of the Hellenes threw out as not expressing a sound of their own. These signs are four:

1. The Βαῦ, F, *Vau*, the later digamma, and later F. It has remained as the sign for six (vulgarly called Stigma, from its modern form). It has therefore every thing, the form, the place, and the numeric power of the Vav of the Hebrew alphabet.
2. Σάνπι, ϡ, *Sanpi*. Its form shows an undeniable likeness with the Phœnician and Hebrew Tsade, and with the Etruscan and Umbrian sign ǂ, found also in the Celtiberian inscriptions. When this hardest of all sibilants was thrown out at the constitution of our present Greek alphabet, the letter was placed at the end, after the modern additional letters, of which the last is Omega (800), to denote 900; an evident proof that the numeral signs are older than their present power. The name may have been corrupted, as Franz suggests, by the gram-

marians, who fancied that they saw a Pi placed in the inside of an S in the form of an inverted C, which they might take to have been a San, although it was not. The name may originally have been Zeta; but what we know is, that the letter Zeta stands in the place of Zain.

3. Σάν, M, *San*, the Hebrew Schin (Sin). It was found useless on account of the Zeta and Sigma (Samech) expressing the two Greek sibilants; and thus it was used as numeral, in its proper place, corresponding to Sin; and the Sigma having been used as the form of the sharp S, it was transported to this place of the alphabet, its old site being occupied instead by Ξ. It is preposterous to assume that this double Greek letter could ever form part of the original alphabet. It is a stranger as well to the old Ionian alphabet as to the Phœnician.

4. Κόππα, Ϙ, *Koppa*, still visible on coins, but only before an O, therefore corresponding to the Kof, Latin q = qu. It was afterwards dropped as useless, in the alphabet, but preserved in its original place as numeral.

Now the question for the historical critic is: Does there exist an organic order observable in this alphabet? Ewald had again positively denied it. Lepsius, however, thought the undeniably organic order in

Beth, Gimel, Daleth,

as representing the labial, guttural, and dental mediæ, and of the three most primitive liquidæ —

Lamed, Mem, Nun,

could not well be accidental. Assuming the corresponding lines of aspirates and tenues to be

F (Vau), Kh (Khet), Th (Thet),
and Pi, Kuf, Tau,

he again found that these letters followed each other in the order required by his hypothesis — labial first, dental last, and the guttural between. As to the primitive vowels, finally, the case is the same,

A, I, U.

The first is evidently represented by Aleph, which is a consonant (like the other Phœnician letters), expressing the softest spirant.

Taking the U (including the O) to have been originally represented by the Ghain, the strongest spirant, and the I by ancient He (expressing as well the I sound as the E), he found them also succeeding each other in the organic order; for A is the primitive, most natural, as it were central spirant, and I and U are the two opposite poles; the intermediate sound between A and I being E, and the intermediate vowel between I and U, the sound Ü (as, in French, *u*); and between U and A, O and Ö (French *eu*) are placed on the tonic scale.

The primitive vowels cannot originally have been considered divested from the aspiration connected with them; they must have been spirant consonants, full letters. Now, in placing them in their traditional order, Lepsius received the following perfectly-organic table — an alphabetical πίναξ, with the three vowels as exponents —

1 A	2 B	3 G	4 D
5 H	6 V (F)	8 Kh	9 Th
16 U	17 P	19 Q	22 T

Should it be accidental that we find them all in the order of the later, complete Phœnician alphabet?

It is clear that the primitive liquids were inserted between the aspirates and tenues. They give us, instead of these 12, now 16 letters, and these again in the order of the Phœnician alphabet, as the following Table will show.

1 A	2 B	3 G	4 D
5 H	6 V	8 Kh	9 Th
	12 L	13 M	14 N
16 U	17 P	19 Q	22 T

These fifteen letters may indeed have been found sufficient to express the sounds necessarily required. The sounds wanting are, first the R, a demonstrably late separation from the primitive L, which, as in Egyptian, is between our L and R; and, then, the sibilants, or the strengthened spirants.

Without entering into the farther development which Lepsius has given to his hypothesis, and leaving to others the solution of the

difficulties which present themselves on some points, I submit to my readers a synopsis of the complete historical alphabet of Canaan, destined to facilitate the understanding and remembrance of the preceding remarks. I shall give it in the form of a Table (πίναξ), as the ancient alphabets probably were written. My readers will observe that, in dividing the alphabet into five lines, of which the highest comprises the primitive first 4 letters; the second, 5; the third, 6; the fourth, 7, we receive by this arrangement a conical Table, of which the first, second, and third have as exponents the three spirants of the old alphabet — the third has Jod or the representative of the I vowel, separated from the E, which, according to this division, is now exclusively represented by the He. I am far from taking this as a farther proof of the basis of the system of Lepsius; but I am certain that the system of considering Aleph, Jod, and Vau as representatives of the three vowels A, I, U or O, is not primitive.

1	2	3	4
Aleph,	Beth,	Gimel,	Daleth,
A	B	Γ	Δ

5	6	7	8	9
He,	Vav,	Dsain,	Khet,	Thet,
E	Βαῦ	Z	H	Θ

10	11	12	13	14	15
Jod,	Kaph,	Lamed,	Mem,	Nun,	Samech,
I	K (20)	Λ (30)	M (40)	N (50)	Σ (Σίγμα) (replaced by Ξ,) 60.

16	17	18	19	20	21	22
Ghain,	Pe,	Tsade,	Quf,	Resch,	Schin,	Tau.
O (70)	Π (80)	Σάντι	Κόππα (90.)	P (100)	Σάν (200) (late Sigma.)	T (300).*

Whatever, then, be the original extent and order of that Phœnician alphabet, it certainly appears to have originated in a great and genial thought. It opened to the human mind a new road, quite different from the phoneticism which had slowly and imperfectly developed itself in Egypt and Babylon. The form has not the slightest connection with the cuneiform mode of writing, but is undoubtedly connected with hieroglyphics of Asiatic origin. No ingenuity, and

* The numerical series, calculated for the complete Greek alphabet, proceeds thus:

ϒ	Φ	Χ	Ψ	Ω	ϡ
400	500	600	700	800	900

scarcely any perversity, can reduce the cuneiform-character groups of Babylonia to anything like hieroglyphic writing; of which the most stringent proof is the ideographic groups of words like "king," "man," "sun," "moon," of all of which the figurative form cannot be doubtful. Everything in this system leads to the supposition, either of arbitrary arrangement, or of priestly contrivance invented on purpose, and intended to make the writing of the official language a mystery, because entirely conventional.

On the other side, it is impossible not to recognise the representation of real objects in the ancient Phœnician letters, discernible even in the square Babylonian writing, a branch of the demotic writing of Babylonia and Syria, adopted by the Jews after the exile. The following Table gives the most probable interpretation, founded in particular upon the researches of Gesenius and Roediger.

I. Aleph	Bull (head with horns).
II. Beth	Tent (the original meaning; that of house is later, and the angular form of the letter is the original).
III. Gimel	Camel (the long neck).
IV. Daleth	Door (the square form is the original).
V. He	Lattice window, air-hole.
VI. Vav	Hook, nail.
VII. Zain	Weapon (lance).
VIII. Khet	Paling.
IX. Tet (*Arab.* Tait)	Serpent.
X. Jôd	Hand (with wrist).
XI. Kaph	Hand (originally the later *vola*, the hollow hand, here represented as held up).
XII. Lamed	Prick, prick-stick (*Hebr.* Malmad).
XIII. Mêm	Water (the waves).
XIV. Nûn	Fish.
XV. Samech	Prop, supporting something.
XVI. 'Ajin	Eye.
XVII. Peh	Mouth (open).
XVIII. Tsade	Angle, fishing-hook.
XIX. Qoph	Ax (which is the meaning in Arabic).
XX. Rêsh	Head (of bird or man, with neck).
XXI. Shin (Sin)	Tooth.
XXII. Tav (Tau)	Sign, brand (of beasts), *in Arabic.*

We conclude this chapter with a lithographed Table exhibiting a comparative list of the principal Semitic alphabets, with reference to the preceding researches. In the Appendix C. my readers will find the only known and inedited specimen of native Babylonian writing, with the alphabet, as far as it can be extracted from one short inscription, and with the translation and explanatory notes of Professor Dietrich.

SECOND SECTION.

THE LAST RESULTS OF THE RESEARCHES RESPECTING THE NON-IRANIAN AND NON-SEMITIC LANGUAGES OF ASIA OR EUROPE, OR THE TURANIAN FAMILY OF LANGUAGE.

(Letter of Professor MAX MÜLLER to Chevalier BUNSEN; Oxford August, 1853; on the Classification of the Turanian Languages.)

INTRODUCTORY REMARKS.

"*WHICH of the languages of Hindustán belong to the Arian stock, and which to the Indian family of languages prevalent before the Iranian immigrations, is a disputed point, which we hope will be brought nearer to a settlement by Dr. Müller's lecture this day.*" These were the words in which you did me the honour of introducing me to the British Association at Oxford, in 1847, when laying before the Meeting of that Society the results of your researches into the origin and affiliation of the languages of mankind. But the hope you then expressed was not realized; and I fear that, if you have looked again over my paper as it stands printed in the Transactions of the British Association, it may have disappointed you. The great question, the question of real historical interest, the connexion, namely, of the southern languages of India with any other established family of speech, was in my essay hardly touched on. I had to confine myself there to a vindication of the Arian descent of the northern languages of India — a task which to you may

have appeared almost useless, and is indeed of small importance if compared with that other problem, the origin of the southern dialects.

I, therefore, gladly avail myself of your permission; and, in the space which you kindly allow me in your new work on the philosophy of language, I shall endeavour to state my view of this much controverted question, the origin of the southern dialects of India. It is a question intimately connected with some of the greatest problems of comparative philology, and its solution must depend not only on facts, but on the establishment of principles which may or may not be applicable to a classificatory study of languages. I fear, however, that at present I shall hardly be able to do justice to a subject so difficult and comprehensive. During the last three years my linguistic studies have necessarily taken a very different course, and I have directed my chief attention, away from India and the Southern Peninsula of Asia, to that Western Peninsula of the great Asiatic continent where all the languages, religions, and arts of the old world seem to have been stored up for the present, and formed into what we now call the modern world of Europe. I must, therefore, crave your indulgence, and that of your readers, for this somewhat hurried composition; materials collected several years ago and never intended for publication: and, though I hope I shall be able to defend what I have stated, either as fact or as theory, in the course of this letter, I trust that others, more competent than myself, will take up and will solve a problem that I have ventured to state at your instance, and which, up to a certain point, I hope to elucidate.

That it was not quite unnecessary to establish beyond reasonable doubt the Sanskrit origin of the Bengáli and the other dialects of Northern India, is shown by a remark which a writer of considerable authority on ethnological subjects has since made on that essay. In a work lately published on the

Varieties of Man, the author says: "It is not likely any better case will be made out for this (the Sanskrit origin of the Bengáli and its cognate dialects) than the one contained in a Dissertation of Dr. Max Müller. Yet it is so unsatisfactory that it almost proves the question the other way." Now, it is very true that these languages do contain many features which are apt to deceive us about their real origin and character. There are not only many words of Turanian and Semitic origin which, through channels opened by Mohammedan and Mongolian conquests, have found their way into these dialects, but there is also a whole layer of aboriginal words, words now belonging to the south of India, but yet of every-day use, in the spoken dialects of the north. Some of them have found their way even into the dictionary of the Sanskrit.* Besides, and this is a more important feature, the very grammar of the northern dialects has been infected by the same influences to an extent to which we find analogies only in some of the modern languages of Europe. It is very true that the grammatical system of a language repels foreign intrusions, as every living organism repels mechanical influences. But still the grammar of a language may, to a certain extent, accommodate itself to the genius of a foreign tongue with which it is brought into constant contact. It may imitate, though it does not adopt or borrow. Instances of this occur in the English of the Norman period †; and in medieval chronicles we find Latin terminations occasionally appended to German words. In Albanian and Bulgarian the peculiarity of placing the article at the end, and not at the beginning of a substantive, was probably borrowed from the Wallachian, in which *domnul*, i. e. *dominus ille*,

* See several articles by Dr. Stevenson in the Journals of the Asiatic Societies of Madras and Bombay.

† See Thommerel, Recherches sur la Fusion du Franco-Normand et de l'Anglo-Saxon, 1841. In phrases such as "zour honorabile lettres contenand," or "brekand the trewis" (Let. de G. Douglas à Richard II., 1385), we actually find a French grammatical termination, though its introduction may have been facilitated by the similarity of the Anglo-Saxon termination of the gerunds in *ende*.

had become fixed instead of *il domnu*, i. e. *ille dominus*. The Latin of Ennius also offers a case in point, and even Cicero uses Greek terminations, not only after Greek, but also after Latin words* W. von Humboldt, in his posthumous work "On the Diversity of the Construction of Human Language, and its Influence on the Intellectual Development of Mankind," speaks of the same thing, where he determines the influence which the sacred language of the Buddhists — the Pali — exercised on the spoken Burmese (p. 380.). But we have, perhaps, the most striking instance in Persian, which, in such forms as "gul-i-keniz," the rose of the maid, "dil-i-men," or "dilem," my heart, has adopted, no doubt after Semitic models, a syntactical principle not only at variance with, but diametrically opposed to, all Indo-European grammar. On this more hereafter.

Influences of the same kind are traceable in the northern languages of India; and to a superficial observer they are likely to prove dangerous, and lead to false conclusions or unfounded scepticism. To give an instance: It is a characteristic feature of the southern languages of India, that they distinguish the plural from the singular by adding to the

* The following Greek terminations occur in Latin writers :—

First Declension:	Nom. ê	Gen. ês	Acc. ên	Abl. ê
	âs	„ —	„ ân	„ —
	ês	„ —	„ ên	„ ê
Second Declension :	Nom. ŏs	Gen. (u)	Acc. ŏn	
	on	„ —	„ on	
	ûs	„ (û)	„ ûn	
	ôs	„ ô	„ ôn, ô	
Third Declension :	Nom. —	Gen. os	Acc. ă	Dat. ĭ
	eus	„ eŏs	„ eă	„ ei, î
	es	„ eŏs, ûs	„ eă (ê?)	„ —
	is	„ ios, eos	„ in	„ —
	ys, y	„ yos	„ yn	„ —
	o	„ ûs	„ ô	„ ô
Plur. Nom.	ĕs, îs	„ ôn	„ ăs, îs	„ si, sin
Neutr.	ê	„ —	„ —	„ —

See Schneider's Latin Grammar, Berlin, 1819, vol. iii.

noun a suffix expressive of plurality. In order to form the cases of the plural, they affix afterwards the same terminations which form the different cases of the singular. This is a grammatical expedient foreign to the Arian languages, even in their secondary stages, though, in itself, it is by no means incompatible with any of the leading features of Arian grammar.

In Asamese, "manuh" is man, and without an affix to limit its signification it may be used either for the singular or plural. It may mean man, a man, the man; men, or the men.

The Genitive is manuh-or;
Dative, manuh-oloi;
Accusative, manuh-ok;
Locative, manuh-ot;
Ablative, manuh-e.

If we want to express the plural distinctly, we must add bilak, hont, or bur, particles expressive of plurality; and by affixing the same terminations as in the singular, we get

Nominative, manuh-bilak;
Genitive, manuh-bilak-or;
Dative, manuh-bilak-oloi;
Accusative, manuh-bilak-ok;
Locative, manuh-bilak-ot;
Ablative, manuh-bilak-e.*

We can easily imagine how people speaking the modern Sanskrit dialects, in which the old terminations by which the plural was distinguished from the singular had been worn off almost entirely, should, when again feeling a want to express the idea of plurality more distinctly, have fixed upon a grammatical expedient which, from their daily intercourse with their aboriginal neighbours, had long been familiar to their

* See N. Brown's Grammatical Notices of the Asamese Language: Sibsagor, 1848.

ear and to their minds. The words which they used as the exponents of plurality were of course taken from the resources of their own language; but the idea of using such words for such a purpose seems to have been suggested by a foreign example.

It was necessary, therefore, to state the case fully, and to prove, once for all, that the Bengáli, the Asamese, the language of the Odra, the Hindi and Hindustáni, the Mahratti, the language of Konkana, the Guzerati and Sindhi, the Khasiya or Parbatiya, and the language of Kashmir, are all of Arian descent; that the blood which circulates in their grammar, is Arian blood. If I have succeeded in proving this (and if proved for the Bengáli, it is proved for all the rest), I consider it established, at the same time, that the other languages of India, spoken principally south of the Krishná, are of different origin. But beyond this I did not venture to go. My conviction was then, and is now still more strongly, that these *southern dialects belong to the Turanian family of languages;* that in their dictionary, however, as well as in their grammar, they are largely indebted to their Arian neighbours. But, although I was satisfied myself on this point, I felt at the same time that it involved questions of so great importance that the subject should not be taken up lightly. Nay, I was afraid my advocacy might prejudice the question rather unfavourably, and I thought it ought to be left to persons better qualified than myself to solve this linguistic and ethnological problem.

Even now, in answer to your kind inquiries, I should rather have adopted the negative method of arguing; I mean, I should rather have exhausted possibilities, and proved that these same languages cannot be referred to any other race from which, as far as history and geography go, they might possibly have sprung. I might have endeavoured to show they are neither Semitic, nor Chinese, nor Indo-Chinese, nor Malay, nor idioms transplanted from the east coast of Africa. The characteristic

features of all these languages, with the exception, perhaps, of the last, are sufficiently well known to make it possible to prove their absence in the languages of the Dekhan. However, as you wish it, I shall lay my case before you in a more positive form, leaving it to you to judge whether, even in its imperfect state, it deserves the consideration which you were kind enough to accord to it.

FIRST CHAPTER.

First Section.

History of Turanian Philology.

It is necessary for our purpose, to begin with a general statement on the Turanian family of speech, and to give a short sketch of the progress of Turanian philology. It is a branch of study involving problems of the highest importance for the early history of mankind, and which no doubt would have found greater favour in the eyes of comparative philologists, if the number of languages belonging to this family had not been so large as to make an accurate and philological study of the whole stock an impossibility. The maxim, not to write *about* a language if one cannot write *in* it, is certainly a most salutary one; but it must be given up in so comprehensive a subject as that of Turanian speech in its endless ramifications. In all classificatory sciences the same allowance is made; and if a comparative anatomist is able to arrange by general characteristics animals of which he has seen but slight sketches, and of which he hardly remembers or can pronounce the names, perhaps it may be possible also to classify the Turanian languages without possessing so familiar a knowledge of them as is required for more special or practical purposes.

1. GYARMATHI.

The connexion and family-resemblance of some of the widely separated branches of the Turanian stock, had been discovered and established at a time when the name of the Arian or Indo-European family was still unknown. The close relationship between Hungarian, Finnic, Lapponic, and Esthonic was fully proved by Gyarmathi * in 1799; and he quotes one work, published by Sajnovits in 1770

* Affinitas Linguæ Hungaricæ cum Linguis Fennicæ Originis grammatice demonstrata. Auctore Samuele Gyarmathi, M. D.: Gottingæ, 1799.

("Demonstratio Idioma Hungaricum et Lapponicum idem esse"), and another, published by Hager in 1793, as books of authority in which this point had been established before. If we consider that Gyarmathi's work was written before even the foundation of the science of comparative philology was laid, he deserves to occupy a very high rank among the founders of this science. His comparisons are not mere comparisons of words. In order to establish the common origin of his own language and those of Finland and Lapland, he derives his arguments from their similarity in derivative suffixes, the system of declension and conjugation, the pronouns and their various employments, the postpositions and adverbs, the syntactical rules; and in the last instance only, as he says, from the "similitudo vocabulorum multorum, quod quidem momentum mihi semper ultimum in istiusmodi disquisitionibus esse solet." Indeed, his parallel columns of grammatical forms from Hungarian, Finnic, Esthonic, and Lapponic can leave no reasonable doubt as to the original identity of these idioms. He rejects, however, distinctly the idea of a similar connexion between these languages and Turkish. The number of words common to both, as collected by Gyarmathi, is considerable; but, as he could not discover any similarity in their grammatical system, he repudiated the idea of a Finno-Tataric family. A contrary opinion was expressed at the same time by Kollar, who maintained that Turkish and Hungarian agreed in the leading features of their grammar, but denied the similarity of their vocables. It should be mentioned at once that the principal argument which Gyarmathi brings forward against the grammatical affinity of Hungarian and Turkish, is derived from the pronominal elements, which, he says, differ so much as to exclude for ever the possibility of a common origin. We shall see, however, that exactly in the pronominal elements the most striking coincidences have since been established.

2. KLAPROTH, RÉMUSAT, ARNDT.

The first step in advance after Gyarmathi was made by Klaproth*, who proved that the languages of the Caucasus, with the exception

* Klaproth, Reise in den Kaukasus, 1814. Asia Polyglotta, 1823, p. 133.

of the Ossetic, have a great similarity with the Samoïedic or North Asiatic dialects; while Rémusat, though in a different way, contributed toward the solution of the same problem by his "Recherches sur les Langues Tartares" (1820).*

Rémusat denied the affinity of the Turkish, Mongol, and Mandshú languages. He says ("Recherches," p. 138.): "La ressemblance de quelques expressions Turkes, Mongoles, et Mandshoues entre elles ne doit pas faire penser qu'il existe entre les trois langues une analogie essentielle et fondamentale. Il y a entre elles plus de différences qu'il n'y en a entre le Russe, l'Italien, et l'Allemand." This, as is well known now, might be admitted without any prejudice to the question at issue.

Arndt†, in 1819, tried to prove that the Bask, in the western-most corner of Europe, belonged to the same family with the Finnic and Samoïedic; nay, that Celtic also clung with some of its roots to the same ancient stratum of speech.

3. RASK

The first, however, to trace with a bold hand the broad outlines of Turanian, or, as he called it, Scythian philology, was Rask.‡ He proved that Finnic had once been spoken in the northern extremities of Europe, and that allied languages extended like a girdle over the north of Asia, Europe, and America. In his inquiries into the origin of the Old Norse, he endeavoured to link the idioms of Asia and America together by means of the Grönland language, which, he maintains, is a scion of the Scythian or Turanian stock, spreading its branches over the north of America, and thus indicating the ante-diluvian bridge between the continents of Europe and America. According to Rask, therefore, the Scythian would form a layer of language extending in Asia from the White Sea to the valleys of

* Abel-Rémusat, Recherches sur les Langues Tartares, 1820.

† Ch. G. von Arndt, Über den Ursprung der Europäischen Sprachen, published 1817, and again 1827; but written about 1800, during the Russian period of comparative philology.

‡ R. K. Rask, Ueber die Thrakische Sprachclasse, 1818; R. Rask, Ueber das Alter und die Echtheit der Zend-Sprache, deutsch von H. von der Hagen, 1826.

Caucasus, in America from Grönland southward; and in Europe (as Rask accepts Arndt's views) from Finland as far as Britain, Gaul, and Spain. This original substratum was broken up and overwhelmed first by Celtic inroads, secondly by Gothic, and thirdly by Slavonic immigrations; so that its traces appear like the peaks of mountains and promontories out of a general inundation. Only on the north of Asia and its central plains, probably the original hive of the Scythic stock, has the race maintained itself in compact masses, and sent forth even in historical times those swarms of soldiers who made the walls of every capital in the Arian world tremble before them. Rask maintains distinctly the affinity of the Finnic and Tataric idioms, and he denies that the coincidences between the two are simply of a lexicographic character. Again, the three races of Tatars, Mongols, and Tungusians, whom even Klaproth, after admitting a connexion between the languages of the Caucasus and Siberia, considered as distinct, are traced back by Rask to one common type of language and grammar. In maintaining the relationship of these and the Finnic races, great stress is laid by him on what were then considered mixed races of Tatar and Finnic descent,—the Woguls, Wotiaks, and Tsheremissians. Rask denies their mixed character; because, he says, these tribes are peculiarly exclusive in their marriages, and hardly allow members of different tribes to reside among them. Their languages should, therefore (to give Rask's conclusion), be considered, not mixed dialects, but intermediate links in one great chain of speech.

Rask proposed the following division of the Scythian race;

1. North Asiatic.
2. North American.
3. Tatar.
4. Mongol and Tungusian.

4. SCHOTT, CASTRÉN.

Unfortunately, Rask did not live to fill in the grand outlines of this ethnological cartoon. But, as, for his more minute researches into the grammatical growth of the Teutonic languages, he found a worthy successor in Grimm, his attempts to explore the large area of the Scythian world were ably continued by Schott and by Castrén. In Germany, Schott's articles kept alive an interest in these re-

searches. In his essay on the Tataric languages (1836) he stated the problem boldly, and in his work on the Altaic or Finno-Tataric race (1849) he has collected all the evidence that could be brought to bear on its solution. But a new era in the history of Turanian philology begins with one who, though in delicate health, left his study, travelled for years alone in his sledge through the snowy deserts of Siberia, coasted along the borders of the Polar Sea, lived for whole winters in caves of ice or in the smoky huts of greasy Samoïeds, then braved the sand-clouds of Mongolia, passed the Baikal, and returned from the frontiers of China to his duties as Professor at Helsingfors—to die, after he had given to the world but a few specimens of his treasures. This heroic grammarian was Alexander Castrén.* The general results at which he arrived, though based on fuller materials and more accurate research, tend on the whole to confirm Rask's views.

Castrén establishes five divisions of the Turanian family, in place of the four given by Rask. Besides, as Castrén leaves the North American dialects altogether out of consideration, his researches have really added two new distinctions, the North Asiatic and the Mongol class having each been split by him into two. Thus we have, according to Castrén, the following classes: —

1. Finnic 2. Samoïedic	North Asiatic according to Rask.
3. Turkic	Tatar according to Rask.
4. Mongolic 5. Tungusic	Mongol-Tungusic according to Rask.

In the subdivision also differences occur. The Tshudic class,

* Castrén, Elementa Grammatices Syrjænæ. Helsingforsiæ, 1844.
„ Elementa Grammatices Tscheremissæ. Kuopio, 1845.
„ Vom Einfluss des Accents in der Lappländischen Sprache. Petersburg, 1845.
„ Versuch einer Ostjakischen Sprachlehre. Petersburg, 1849.
„ De Affixis Personalibus Linguarum Altaicarum. Helsingforsiæ, 1850.
„ Reiseerinnerungen aus den Jahren, 1838—1844. Petersburg, 1853.

which is the name given by Rask to the Finnic, had been divided by him into I. the Finnic; II. the Ugric; III. the Byarmic stock:

I. *The Finnic stock, according to Rask, has five branches.*

a. Tsheremissian,
b. Mordvinian,
c. Suomian (*i. e.* Finnish),
d. Lapponian,
e. Esthonian.

II. *The Ugric, three.*

a. Hungarian, *b.* Vogulian, *c.* Ostiakian.

III. *The Byarmic, three.*

a. Permian, *b.* Syrianian, *c.* Votiakian.

To this Castrén demurs. He insists on separating I. *a*, and I. *b*, the Tsheremissian and Mordvinian, and considers that the two (to which he formerly added the Tshuvashian) constitute a new branch. According to Castrén, therefore, we get the following stemma of the Finnic stock:

1. FINNIC.

I. *Ugric.*	II. *Bulgaric.*	III. *Permic.*	IV. *Tshudic.*
a. Hungarian,	*a.* Tsheremissian,	1. Permian,	1. Lapponian,
b. Vogulian,	*b.* Mordvinian.	2. Syrianian,	2. Suomian.
c. Ugro-Ostiakian.		3. Wotiakian,	3. Esthonian.

The second, or Samoïedic class, is divided by Castrén into a Northern and an Eastern stock:

2. SAMOÏEDIC.

I. The *Northern* comprises:
a. Yurazian,
b. Tawgian,
c. Yenisean.

II. The *Eastern* comprises:
a. Ostiako-Samoïedian,
b. Kamassian.

The Turkic or Tataric class, to which Castrén has devoted less

attention, is given here after Beresin. He establishes three stocks, each with a number of branches:

3. TATARIC.

I. *Tshagataic* (South-East).	II. *Tataric* (North).	III. *Turkish* (West).
a. Uigurian,	*a.* Kirgisian,	*a.* Derbendian,
b. Komanian,	*b.* Bashkirian,	*b.* Aderbidshanian,
c. Tshagataian,	*c.* Nogaian,	*c.* Krimmian,
d. Usbekian,	*d.* Kumian,	*d.* Anatolian (Asia Minor),
e. Turkomanian,	*e.* Karatshaian,	*e.* Rumelian (Constantinople).
f. Kasanian.	*f.* Karakalpakian,	
	g. Meshtsheryakian,	
	h. Siberian (Yakutian on the Lena).	

The Mongolic class has likewise been divided into three stocks. Castrén in his travels came into special contact with the Mongols about the Baikal, where he studied the language of the Buriates:

4. MONGOLIC.

I. *Eastern Mongols.*	II. *Western Mongols* (Olöt).	III. *Baikal-Mongols.*
a. Sharra-Mongols,	*a.* Kalmüks, Choshot, Dsungar, Torgod, and Dúrbet,	*a.* Buriates.
b. Khalkhas,	*b.* Aimaks (North of Persia),	
c. Sharaigol (Tibet).	*c.* Tokpas (North-East of Tibet).	

The fifth class, the *Tungusic*, is principally represented by the *Mandshu*. This language received its name when it became of political and literary importance, after the Tungusian conquest of China,

in the 17th century. Tungusian dialects are spoken by the *Tshapogires* and *Orotongs* in the west, and the *Lamutes* in the east, of Siberia. Castrén studied the dialect of Nyertshinsk.

Thus we have:

5. TUNGUSIC.

I. *Western.*	II. *Eastern.*
a. Tshapogires,	*a.* Lamutes,
b. Orotongs,	*b.* Mandshu (in China).
c. Nyertshintk dialect (Castrén).	

Castrén, in his dissertation "De Affixis Personalibus Linguarum Altaicarum" (1850), after tracing minutely one of the most characteristic features of Turanian grammar through all the branches of what he calls the Altaic (*i. e.* Turanian) race, concludes with the following remarks: "What has been brought forward about the origin, the formation, the sound, and the whole character of these personal affixes, seems to prove that all the Altaic dialects are more or less related to one another. Some of them are certainly widely distant; as, for instance, the dialects of the Finnic nations in the west, and of the Mongolic and Tungusic tribes in the east. But their difference is not greater than could easily have originated in the course of a thousand years, and these must have elapsed since the separation of these nations took place. During the same time almost all the Altaic tribes came in contact with foreign nations, and received from them the seeds of their present civilisation. New ideas created new words and new forms — nay, a new principle — in the evolution of these languages. Many things were adopted, many things framed after the type of other tongues. It is the office of comparative philology to find out in every language what owes its origin to a modern evolution. And only after this has been done, will a disquisition on the affinity of languages become safe and profitable. I am fully persuaded that an intercomparison of the Altaic languages would as yet be premature; and I have, therefore, in my dissertation attended principally to the single languages, and only mentioned coincidences in the formation of the personal affixes incidentally. Perhaps it will be my lot at another time to demonstrate the affinity of the Altaic languages in a more convincing manner."

We see, in these words, Castrén's conviction on the affinity of all the Altaic languages expressed clearly, though with caution and modesty. Another passage in the same dissertation bears on this point. He says: "After studying for a long number of years Finnic, Samoïedic, Turkic, Mongolic, and Tungusic dialects, it seems, as far as I can see from my own researches, that we must not look in them for so close a relationship as that by which the Indo-Germanic languages are held together like so many branches of one and the same stock. But that there exists between them both a formal and a material congruence, particularly between Finnic, Samoïedic, and Turkic, I maintain still, as I stated it some time ago. Whether this congruence is so great as to enable us to trace all these dialects back to one common source, is a question which the next generation may hope to answer. To us it seems that these idioms branch off together, and dissolve themselves into different stems or families, but that they still belong to one class or race. Certain it is, that they are more related to one another than to any of the Indo-European languages."

5. VON DER GABELENTZ.

Von der Gabelentz has treated the same question in his grammatical outlines, and in several articles devoted to Turanian philology published in the "Zeitschrift für die Kunde des Morgenlands." By a previous study of the Arian languages, Von der Gabelentz was admirably prepared for this larger sphere of linguistic research, and his works give full evidence of his great power of observation and a most comprehensive grasp in arranging. According to his opinion also, the Turanian languages — Tataric, Mongolic, Tungusic, and Finnic — constitute one family. This at least seems to be his last conviction, at which he arrived after a continued study of these idioms; and it is the more valuable, because in his earlier works — for instance, in his Mandshu grammar (1832) — he entertained a different view: admitting the striking resemblance between the grammatical and phonetic systems of the Mandshu, Tataric, and Mongolic dialects, but not allowing their affinity.

6. BOEHTLINGK.

If we may quote Von der Gabelentz as a high authority in favour of the common origin of the Turanian languages, there is another scholar, of no less weight, particularly where questions of grammatical detail are concerned, who has lately thrown considerable doubt on this subject; I mean Professor Boehtlingk, in his work "Über die Sprache der Jakuten" (1851). It is a work of the most massive industry, and it bids fair to raise the science of Tataric grammar to the level of Greek and Sanskrit philology. It is particularly important for the more special study of the Tataric languages, because, according to Professor Boehtlingk, the Yakute dialect became separated at a very early time from the still undivided Turko-Tataric speech, and therefore exhibits a most primitive specimen of what he proposes to call, instead of Turkic or Tataric, the Yakuto-Turkic class. An admixture of Mongolian words in Yakutian, and an adoption even of Mongolian grammatical terminations, is explained by a long-continued historical contact between Yakutic and Buriatic tribes. But this work throws also much light on questions of a more general bearing. The Introduction particularly contains most valuable remarks on the true principles which ought to guide us in the classification of languages. Professor Boehtlingk afterwards enters more particularly into the question of the affinity between the Finnic, Samoïedic, and Tataric classes of the Turanian race. On this point he has been engaged in a long controversy with Professor Schott of Berlin, a controversy carried on with an animosity something more than Attic. Professor Boehtlingk stands up for the principle that it is dangerous to write on languages of which we do not possess the most accurate knowledge. Professor Schott, on the contrary, thinks that a limited knowledge is sufficient for settling the general question as to the common origin of languages. No doubt Professor Boehtlingk has proved that several words and forms which Professor Schott supposed to be mutually related are different in origin, and that, with his method, he cannot guard altogether against similar mistakes. In so comprehensive a comparison of the Turanian idioms as Professor Schott undertakes, errors must occur which, in the present state of comparative philology, an Arian scholar can easily avoid in his more limited and more matured researches.

No one who has studied in the school of Bopp and Pott would think of comparing ἀνάλογος with German "ähnlich," Persian "behter" with English "better," German "ei," egg, with English "eye;" or even Greek ἰός, poison, with ἰός, arrow; Greek νέω and νέω, Latin "nare" and "nere." In a comparison of Turanian dialects, erroneous comparisons like these would be more difficult to avoid. Nor would it be possible always, in the present state of Turanian philology, to discover that words so different as "même" and "semetipsissimus," "larme" and "tear," "rédemption" and "rançon," "age" and "eternity," "cousin" and "sister," were originally identical. There are certainly some very strong points which Professor Boehtlingk has established against Professor Schott; as, for instance, his comparison of the possessive affix lyk (Tataric) and ly (Osmanli) with the Teutonic lich, lik, and ly in "friendly." Yet, after his philological fury is relieved, Professor Boehtlingk never represses a natural impulse of honesty and fairness. He says: "If Professor Schott, in his work on the 'Altaic or Finno-Tataric Languages,' had no other purpose than by a massive collection of words and roots, apparently connected, to make it seem likely that the Ural-Altaic languages stand to each other in a nearer degree of relationship than to other languages, one cannot help admitting that he has gained his point. But, after this is admitted, we must insist all the more strongly, that, before the single classes have been studied more accurately and raised to the standard of comparative grammar, an end should be put to further labours of this kind."

It is evident from this, that, while Professor Boehtlingk from his point of view considers such preliminary researches as without the pale of science ("unwissenschaftlich"), he forgets that they involve questions of great and pressing importance, and that, on the threshold of every science, attempts of this kind are necessary, nay useful. Without Frederick Schlegel, we should have had no Bopp and Pott; without Sir William Jones, no Colebrooke and Wilson. We are but too much inclined, particularly when science becomes a profession, to mistake the means for the object, and to lose sight of those problems to which our professional studies are but subservient. It should be remembered that what is now called comparative philology is, after all, only a means toward a solution of some of the most important philosophical and historical questions.

However, the great question here before us may be stated in a different manner, and the answer that can be given even now will be such as to satisfy all purposes of ethnological research. The first question is this: "Supposing the Finnic, Samoïedic, Tataric, Mongolic, and Tungusic languages had no original affinity, is it possible to account for the coincidences which have already been pointed out between them?" If not, the next question is: "Supposing they had one and the same source, can we account for the differences such as have been pointed out between them?" To this latter question, I think, the answer will be in the affirmative, if we consider for a moment the relation between languages such as Portuguese and Sanskrit, and if we take into consideration the peculiar circumstances under which the dialects of the Turanian nations have grown up. It is this latter point which requires a more particular consideration.

Second Section.

General Division of Languages into Family, Nomad, and State Languages.

The *Turanian* languages may be characterised as *nomadic*, in opposition to the *Arian* languages, which, in their grammatical and etymological economy, partake of what may be called a *political* character. A similar idea is expressed etymologically, though perhaps not intentionally, in the very names of Turanian and Arian—the former being derived from a root meaning "to be swift," "to roam about;" the latter, from a root which is best known to us in the Latin *arare*, the Greek ἀρόω. From this ancient root, AR, we have in Sanskrit, *ărya**, which meant originally a husbandman, a man of the third caste, a Vaisya; then took the sense of lord of the soil, "assiduus;" and lastly, in its derivative form of *Ârya*, became the name of honour in which the Brahmanic Indians delighted as early as the times of the Veda. This climax of meaning may seem peculiar, and peculiar it may perhaps be called if we remember that "peculiaris" is derived from "peculium" and "pecus," chattel and cattle, and that therefore it means what is proper, right, though it be strange to others. Now it

* See Pân. iii. 1, 103.

is a well-known fact, — well known, at least, since Wilhelm von Humboldt explained and proved it,—that language is the outward expression of what he calls the spirit or individuality of a nation. Starting from this point of view, and resting on the principles which Humboldt established, I propose to divide languages, according to the same principles on which we divide the different forms of political societies, into three general classes, into "*Family*," "*Nomad*," and "*State*" languages. These three divisions correspond very nearly with Humboldt's morphological classification, as formularised by Pott, where we find the three classes of "*isolating*," "*agglutinative*," and "*inflectional*" languages. Pott adds a fourth class, which he calls *transnormal* or *incorporative*, i. e. the polysynthetic American dialects. Humboldt adds an intermediate class between the monosyllabic and agglutinative. But there really exists no language which is entirely monosyllabic, or entirely agglutinative, or entirely inflectional. In most languages, traces can still be discovered which show that every one of these three formative principles has at one time been at work in it, although the general character is sufficiently fixed by the preponderating influence of the one or the other. Humboldt, however, considers these three classes as perfectly distinct, and denies, or at least does not venture to assert, the possibility of historical transition between them. He establishes in an earlier work the following four principles.*

"I. Language expresses originally objects only, and leaves the understanding to supply the connecting form. Language endeavours to facilitate this supplementary act by the position of words and by expressions which, though originally indicative of objects and things, may be understood as referring to relation and form. Thus, in the lowest stage, grammatical articulation is represented by phrases and sentences.

II. These expedients are reduced to a certain regularity; the position of words becomes fixed; the words in question lose their independent character, their material sense, often their original sound. Thus, in the second stage, grammatical articulation is

* Über das Entstehen der grammatischen Formen und ihren Einfluss auf die Ideenentwickelung: 1822.

conveyed by fixed construction, and by words whose meaning is half material, half formal.

III. The position of words becomes uniform; formal words are brought in contact with material words, and become affixes. Their connexion, however, is not yet inseparable: the sutures are visible; the whole is an aggregate, but not yet an unity. Thus, grammatical articulation in the third stage is conveyed by what is analogous to form, but not yet formal.

IV. Formal elements at last prevail. The word becomes one, modified only by a change of inflectional sound, according to its grammatical position. Every word belongs to a category, and has not only a lexicological, but also a grammatical individuality. Words expressive of form have no disturbing secondary meaning, but are pure expressions of relationship. Thus, in the highest stage grammatical articulation is conveyed by true form, by inflection, by purely grammatical words."

Third Section.

Mutual Relation of the three Forms of Language, progressive and retrogressive.

HUMBOLDT, BUNSEN.

After this lucid statement of the gradual growth of grammatical forms, it is extraordinary that Humboldt should still have doubted a possible historical transition between the different forms. Professor Boehtlingk's words on this point deserve to be quoted together with Humboldt's. "It is inconceivable," he writes, "how, with such a view on the origin of inflection, any one can doubt for a moment about the possibility of two such languages as Chinese and Sanskrit having the same origin. I say the possibility, not the historical reality, because all attempts at *proving* such a common origin ought from the very beginning to be stigmatised as vain, futile, and therefore unprofessional."

With the exception of the last clause, this expresses exactly the point at issue between Humboldt's view and your own convic-

tion on the historical scale of languages enforced in your lecture delivered at Oxford in 1847. Pott also, as Boehtlingk remarks, is on your side, and expressed his opinion in 1836 in the following words: "It is certainly conceivable that the formation of the Sanskrit language, as it is handed down to us, may have been preceded by a state of the greatest simplicity and entire absence of inflections, such as is exhibited up to the present day by the Chinese and other monosyllabic languages."

I should say, that, in the same manner as in every body-politic, traces of a former nomadic or even family life can be discovered, we may really discover in all Arian languages traces of a Turanian and Chinese formation through which they had passed. Nay, during periods of anarchy, conquest, and migration, political languages seem to relapse into nomadic unsettledness, and during periods of apathy and stagnation nomadic languages may fall back into a state of Chinese helplessness. But what interests us here is the ascending scale, the primary growth of languages, not their secondary formations and reformations.

§ 1. *Character of Family Languages. Chinese.*

In a family, though at first it only lives in and for itself, occasional starts of nomadic dispersion must naturally take place; and history again shows us occasionally, in nomadic tribes, incipient traces of a political concentration. The same is the case in language. In Chinese, though it may properly be called the most perfect type of a family language, we see that the expediency of agglutinative forms began to be felt. This is most palpable in the spoken dialects of China, and in other languages, commonly called monosyllabic. In the Shanghai dialect, *wo* is to speak, as a verb; *wo-da*, a word. *Woda* would be the nominative, *wodaka* the genitive, *pela woda* the dative, *tang woda* the ablative.* The characteristic feature, however, which is impressed on the face of the old Chinese language, is just what we may observe among ourselves in the conversation of friends accustomed to speak together on familiar subjects. It is a style

* The Gospel of St. John in the Chinese Language according to the Dialect of Shanghai, by Professor J. Summers, 1853.

of thought and speech, not unusual even now between husband and wife, between mother and daughter. The one generally knows beforehand what the other is going to say, and words are used more to indicate than to describe thought. Long sentences are hardly thought of, because misapprehensions are not possible, and particular intonations, familiar accents, are sufficient to prepare the mind of the hearer for what he has to expect. These intonations even have been fixed and preserved in Chinese, though originally they may have been nothing else than what we may observe in our own parlance, when, for instance, in dictating to a writer, we tell him "Right," or "Write." Sometimes, however, the Chinese, particularly the old Chinese, approaches to a style of speech such as only a solitary thinker could frame in his conversations with himself; a kind of algebraic chain, intelligible to the initiated but not to others. It has been truly said, therefore, that, as a language, Chinese is admirably fitted for meditation and reflection. It is a language of Brahmanic Munis, but unfit for the forum; and, though it would convey a false idea to characterise the Chinese as a "parler enfantin," it may truly be compared to the short-hand conversation of a small and rather monosyllabic family.

§ 2. *Character of Nomad Languages.*

The Turanian language goes a step beyond this. It expresses in words, not only ideas, but the relation of ideas. The Turanian life is no longer a family life, or the life of a troglodyte Muni. It is the life of tribes, where the individual and the family are separated only by the floating walls of tents, and in daily intercourse with their clansmen. It is an indispensable requirement in every nomadic language, that it should be intelligible to many, though their intercourse be but scanty. The introduction, therefore, of elements expressing as clearly as possible the grammatical relation of words, the invention of signs, whether natural or conventional, for distinguishing between nominal and verbal roots, the avoidance of everything that might obscure the meaning of words or the intention of their grammatical exponents, distinguishes the Turanian from the Chinese.

§ 3. *Character of State Languages.*

The difference between the Turanian and the Arian, between the nomadic and the political languages, is not less characteristic. In the Turanian dialects, as long as they remain purely nomadic, the suffixes, whether in themselves intelligible or not, are felt as modifying elements, and as distinct from the words to which they are attached or "glued." In the Arian languages, the modifications of sense produced by prefixes and suffixes are perceived; but the suffixes themselves are no longer felt as the sole cause of these modifications. The difference is the same as between a compositor and a reader. The compositor puts the *s* to the end of a word and looks on the type *s* in his hand as producing the change of pound into pounds. To the reader the *s* has no separate existence (except on scientific reflection); the whole word expresses to him the modified idea, and in his perception the same change is produced by "penny" and "pence" as by "pound" and "pounds."

It is a mistake to imagine that it is a distinguishing mark of the Turanian languages to express the relations of grammar by independent words. Most of the Turanian suffixes must originally have been independent words; but the same applies to the Arian and the modern Chinese languages, and, as far as etymological science is concerned, more of the Arian than of the Turanian suffixes have as yet been traced back to their original form and independent meaning. Humboldt admits this, and he says that even in Burmese, which is half-brother to Chinese, the case terminations can but rarely be traced back to their original meaning. The sign of the plural "to," for instance, can be explained only if, disregarding the accent, we derive it from "tô," to increase, to add. Professor Boethlingk has established the same by abundant evidence.

Fourth. Section.

General Features of Nomad or Turanian Languages.

§ 1. *Integrity of Roots.*

There has been an instinctive feeling in the Turanian nations, which led them to preserve their roots unchanged, although they

allowed them to be surrounded by a large number of prefixes and affixes. The radical and significative portion of their words always stands out in distinct relief, like a living nucleus, and it is never obscured or absorbed, as frequently in the Arian languages. *Age*, in French, for instance, is *eage* and *edage* in Old French; *edage* is a corruption corresponding to a Latin *ætaticum; ætaticum* is a derivation of *ætas*, *ætas* an abbreviation of *ævitas*, and in *ævum* *æ* only is the radical portion, containing the germ from which all the other words derive their life and meaning. What trace of *æ* (*αἰει*, *αἰ-ων*, Sk. âyus) is there left in *age?* Turanian languages cannot afford to retain such words as *age* in their living dictionaries; and perhaps, from a linguistic point of view, such words can hardly be considered as an ornament to any language. In the few cases where Turanian civilization has reached the point at which the language of the race becomes the object of philosophical and historical research, in the few cases where we meet with Turanian grammarians, Turanians giving their own thoughts on the peculiarities of their own language, the distinctness of the radical elements in every word is generally pointed out by them as a feature which they consider essential to all language, and for the absence of which, in the Arian dialects, they find it difficult to account. The Bask, which is in this respect the very type and perfection of a Turanian language, has produced several grammarians; and one of them, Darrigol, dwells very strongly on this point. He says (p. 18.):

"Comme c'est un vice dans le langage que les syllabes radicales, sans le concours des inflexions accidentelles, soient souvent impuissantes pour faire un sens même générique; ce serait aussi une autre extrémité vicieuse, qu'un mot primitif, par là même qu'il aurait un sens, fût nécessairement déterminé à un sens spécifique, adjectif, substantif, adverbial, &c. La monosyllable *az*, par exemple, répond à peu près à l'infinitif *nourrir;* je dis à peu près, parce que le sens qu'elle présente est encore plus vaste et plus indéfinie que celui de l'infinitif français. La monosyllable *az* est une radicale sur laquelle nous établissons naturellement:

az-te (*nourrir*),
az-le (*nourricier*),
az-cai (*nourrisson*),
az-cor (*nourrissant*),
az-curri (*nourriture*),
az-i (*nourri*), &c."

In Turkish, also, the root is never obscured, though surrounded by a luxuriant growth of conjugational derivatives. We have

sev-mek, *to love,*
sev-me-mek, *not to love,*
sev-e-me-mek, *not to be able to love,*
sev-dir-mek, *to make love* (causative),
sev-dir-me-mek, *not to make love,*
sev-dir-e-me-mek, *not to be able to make love,*
sev-dir-ish-mek, *to make one love one another,*
sev-dir-ish-me-mek, *not to make one love one another,*
sev-dir-ish-e-me-mek, *not to be able to make one love one another.*

In all these forms the radical element "*sev*" is distinct and prominent, and so it is in all Turanian languages; while in Semitic, and still more in Arian formations, the root may be affected and changed to such an extent that even an experienced scholar has difficulty in disentangling it.

§ 2. *Formative Syllables felt as distinctive Elements.*

It is not necessary for the purposes of Turanian grammar, that the suffixes should retain their etymological signification; but it is essential that they should be felt as distinct from the word to which they are appended. It requires tradition, society, and literature to keep up forms which can no longer be analyzed, and in which the formal elements cannot at once be separated from the base. The Arian verb, for instance, contains many forms where the personal pronoun is no longer felt distinctly. Still tradition, custom, and law keep up the understanding of these veteran words, and make us feel unwilling to part with them. This would be incompatible with the ever-shifting state of a nomadic society and language. No debased coin can there be tolerated, no obscure legend accepted on trust: the metal must be pure, and the legend distinct; that the one may be weighed, and the other, if not deciphered, at least recognized as a well-known guarantee. A Turanian might tolerate the Sanskrit:

as-mi, a-si, as-ti, 's-mas, 's-tha, 's-anti,
I am, thou art, he is, we are, you are, they are

or even the Latin :

's-um, e-s, es-t, 'su-mus, es-tis, 'sunt.

In these instances, with a few exceptions, root and suffix are as distinguishable as, for instance, in the Tsheremissian :

ol-am, ol-at, ol-es, ol-na, ol-da, ol-at.

Nay, the identity of sound in two such forms as *ol-at*, thou art, and *ol-at*, they are, shows the Tsheremissian at a disadvantage if compared with Sanskrit. But a conjugation like the Hindi,

hun, hai, hai, hain, ho, hain,

would not be compatible with the genius of the Turanian languages, because it would not answer the requirements of a nomadic life. Turanian dialects exhibit either no terminational distinctions at all, as in Mandshu ; or a complete and intelligible system of affixes, as in the spoken dialect of Nyertshinsk. But a state of conjugation in which the suffix of the first person singular and plural and of the third person plural are the same, where there is no distinction between the second and third person singular, and between the first and third person plural, would necessarily lead to the adoption of new and more expressive forms in a Turanian dialect. New pronouns would have to be used as suffixes, or some other expedient to be resorted to for the same purpose. In the Arian family this confusion of distinctive terminations is most general in, but by no means confined to, the youngest members. In English it is only the second person singular, a form hardly ever used, which has retained its characteristic termination in the imperfect. But even in Anglo-Saxon, instead of the Gothic plural *bindam, bindith, bindand*, ligamus, ligatis, ligant, we find the second person *bindad* used equally for the first and third. And in the passive we see the Gothic also equalize the first and third person singular, and the three persons plural,—a proceeding unknown, or at least very rare, in any real Turanian dialect.

§ 3. *Facility in producing new Forms.*

Hence we may understand how the Turanian languages continue to retain their creative power of producing new grammatical forms. A Turanian, to a certain extent, holds himself responsible for his grammar. Though he does not spontaneously create every grammatical form as he is using it, still he participates to a certain extent in its formation, inasmuch as he not only forms his words into a sentence, but also his roots and suffixes into words. A language containing this grammatical consciousness may live and grow, and may produce analogous forms, after discarding forms which had become corrupt, dead, and unintelligible.

Castrén, in his dissertation "De Affixis Personalibus" (page 13.), bears witness to the fact that, while the literary language of the Mongolians has no pronominal affixes, whether subjective or predicative, this characteristic feature of the Turanian family has but lately broken out in the spoken dialect of the Buriates, and in the Tungusic idiom spoken near Nyertshinsk, in Siberia. We must guard here against a mistake. These primary formations of Turanian grammar are different in principle from the secondary or analytical formations in the Arian languages which they resemble. The Turanian appends his terminations again and again to verbal or nominal bases, thus forming new grammatical compounds; while modern Arian dialects retain the corrupt matter of a former organism, and form small sentences by putting explanatory prepositions and pronouns before words worn-out by use.

If we consider that in Turanian grammar the adoption of the pronominal suffixes, subjective and predicative (as it has taken place but lately in some Tungusic and Mongolic dialects), means really the introduction of a new conjugation and the remodelling of the principal part of declension, we must allow that the Arian languages can show nothing similar to this power, not of renovation only, but of regeneration.

§ 4. *Scarcity of irregular Forms.*

While the Arian languages, compared with the Turanian, are weak on this point, they are, on the other side, strong in what no-

madic races possess hardly at all:—irregular and dialectical forms. To keep up such forms in grammar, language requires tradition and different social elements, which the plains of Central Asia and the taciturnity of Mongolian tribes could not furnish. " Without an uninterrupted continuity between successive phases of speech, without a mutual intercourse of dialects, nothing irregular can maintain itself in language. Thus, as most Turanian languages are the languages of the day; as they are, so to say, in the power of each generation; as they cannot resist change, cannot preserve what is not continually revived and used, we may understand why they are so extremely regular and monotonous, without any of those strange anomalies which, in the Arian languages, harass the student, but delight the scholar. Professor Boehtlingk's statement fully confirms this view. "In the agglutinative languages," he says *, "we find that one and the same grammatical relation is always expressed in the same manner, making allowance only for purely euphonic changes, which are regulated by very general laws. In the Indo-Germanic languages, one and the same relation is frequently expressed very differently, varying according to the words or whole classes of words to which they refer. It is impossible there to account for the difference of termination by general euphonic laws. In the Ural-Altaic languages, on the contrary, we have *one* declension and *one* conjugation, and only a very small number of irregular forms. In the Indo-Germanic, we meet with several declensions and conjugations, and a mass of irregular forms, which all point to a long-continued life, or at least to a life of intense individuality in grammatical formation."

§ 5. *Rapid Divergence of Dialects.*

Another feature of the Turanian family of languages, intimately connected with the two which have just been pointed out (their power of renovation, and their regularity of formation), is the great variety of grammatical growth to which the members of this family are liable if once split and separated for any length of time. If a nation retains the consciousness of its grammar, if the

* Introduction, p. xxiv.

idea which it connects, for instance, with a plural is only that of a noun followed by a syllable indicative of plurality, it is evident that many forms are possible to realize this idea. In Tibetan the plural may be expressed by thamtche (all), tha-ded (each), koun (many), as in Chinese by tchou, ko, tchoung. (Rémusat, "Lang. Tart.," p. 362.) The same applies to several of the modern languages of India; and in some these plurals of substantives are so clearly felt as compounds, like "animal-mass" or "stone-heap," instead of "animals," "stones," that the verb after them is put in the singular and not in the plural. Nay, even after a suffix expressive of plurality has again been obscured, and can no longer be identified with any collective noun, we may still perceive its original nature by seeing that plurals formed on this principle continue to have the verb in the singular. The same applies to the plural of Greek neuters, which were originally collective nouns, i. e. feminines in the singular. If the ablative is expressed by an additional syllable, expressive of removal, distance, or cause, many syllables would equally answer the purpose. Thus we find in Bengáli, kartrik, hetuk, pûrvak, diyâ, rahit, sange, sati, hoite, &c. all used in the sense of the Latin ablative. However, in one and the same clan during one and the same period, one suffix would most likely become popular and be fixed for certain grammatical categories. Thus, out of a large mass of possible formations, a small number only would become customary and technical, so as in the end to lead to a scheme of declension such as we find in political languages. Different hordes, however, as they became separated would feel themselves at liberty to repeat the same process, and might thus fix in their different idioms different phases of grammatical life, which, if confined to one and the same tribe, would have disappeared without leaving any traces. Thus the power of self-conscious renovation which, as confined to one and the same dialect, had only the effect of discarding old and irregular forms, may, if exercised on diverging dialects, produce such a total difference between idioms most closely related, as to make them appear entirely disconnected.

§ 6. *Contrast between the Progress and Growth of Turanian and Arian Languages.*

If we try to put the life and growth of such languages clearly before us, we shall find that in a nomadic language the sudden rise of a family or of a small association may produce an effect which, in political languages, can only be produced by the ascendancy of a town or a province, a race or a religious sect. The peculiarities of a family may there change the whole surface of a language, and the accent of a successful Khán may leave its stamp on the grammar of his whole tribe. When one of the great Tatar chiefs proceeds on an expedition, he, as Marco Polo tells us in the fourteenth century, puts himself at the head of an army of a hundred thousand horse, and organizes them in the following manner. He appoints an officer to the command of every ten men, and others to command a hundred, a thousand, and ten thousand men respectively. Thus, ten of the officers commanding ten men take their orders from him who commands a hundred; of these, each ten from him who commands a thousand; and each ten of these latter from him who commands ten thousand. By this arrangement each officer has only to attend to the management of ten men, or ten bodies of men, and the word of command is spread from the Khán to the last common soldiers in a hundred thousand, after passing through not more than four mouths. This is characteristic, linguistically as well as politically.

In political languages, a change of grammar is generally preceded by a political revolution, by war of races and conquest. Such changes, whether they happen in the steppes of Tatary or in the capitals of Europe, we are accustomed to call the growth of languages, because we generally look only at the surface of languages and are hardly able to discover the continual undergrowth of individual expressions, family words, cockneyisms, provincialisms, and dialects. But languages really cannot be said to grow in the sense of continually advancing and rising. Grammatical forms have no substantive existence (*οὐσία*). They exist as forms in the speech of nations, and the speech of a nation again has its existence in the speech of individuals. It is, therefore, in the case of phonetic changes only that

we can speak of one word being changed into another; but old forms never grow into new ones. Old leaves fall and new leaves appear. Out of many possible forms and varieties some rise to the surface; while others, which had been classical for a time, are blown away. But the new forms existed long before, and the old forgotten forms may sometimes reappear. When the language of Germany ceased to be Gothic and became High German, it was not because Low German had grown into High German. The people who spoke Gothic had passed away from the literary or political stage of Germany; few only lingered behind: large masses of Franks pressed on, and soon the language of the church, of the court, and of the poet was High German and no longer Gothic. But High German existed long before; just as Italian existed long before Dante, and Italianizing forms may be discovered as vulgarisms as early as the time of Cato.

There are two changes in grammar which must be distinguished. The one is produced suddenly by conquest or migration, and we may call it a *dislocation of language.* Thus Gothic was dislocated by High German; and the effects are clearly visible not only in grammar, but also in the regular dislocation (verschiebung) of the phonetical system. The other change is wrought without any violent concussion; as it were, by the wear and tear of a language in its own working. A number of possible analogous forms rise slowly and imperceptibly into existence and use; individual words or modes of expression become popular and general, and dialects intermix and exchange. This may be called a *secondary formation* in language. Frequently a dislocation of language brings out more manifestly the accumulated effects of a previous process of secondary formation; because, if the higher ranks of society are broken and literary occupations for a time discontinued, the spoken language has an opportunity for throwing off the fetters of literary usage, and legitimizes at once its numerous natural offspring. Arian languages, particularly in modern times, change principally by the former, Turanian by the latter process.

Fifth Section.

On the Principles of Formation and Derivation in the Turanian Languages.

We have hitherto considered the nomadic state of language in its general effects on grammar. It is necessary now to consider how the same nomadic spirit would act more particularly on the formation of grammatical categories and the derivation of words.

§ 1. *Scarcity of Synonymes and Homonymes.*

As most words are originally appellatives or predicates expressive of distinguishing qualities, one object was capable of many names in the ancient languages. In the course of time, however, the greater portion of these synonymes became unintelligible and useless, and they were mostly replaced by one fixed name which might be called the proper name of such objects. The more ancient a language, the richer it is in synonymes. Synonymes, again, if used constantly, naturally give rise to a number of homonymes. If we may call the sun by fifty different names expressive of different qualities, it is clear that some of these names will be applicable to other objects also which happen to possess the same qualities. These different objects would then be called by one and the same name; they would become homonymes. It is clear that this luxuriant growth of poetical appellatives must lead to confusion; and it is only in small and compact communities, and by the help of national poetry, epic or sacred, that synonymes and homonymes can be kept up for any length of time. They do exist in the ancient Arian languages, and form a peculiar charm in their poetry; but even there, even in political languages, they become more and more embarrassing. In the Veda the earth is called "Urvî" (wide), "Prithvî" (broad), "Mahî" (great), and many more names, of which the Nighantu mentions twenty-one. These twenty-one words would be synonymes. But Urvî, again, is not only a name of the earth, but it also means a river. Prithvî or prithivî means not only earth, but sky and dawn. Mahî is used for speech and cow, as well as for earth. Therefore earth, river, sky, dawn, speech, and cow

would become homonymes. To the genius of nomadic languages the continuance of such words is utterly repugnant. Most of these old terms, thrown out by language at the first burst of youthful poetry, are based on bold metaphors. These metaphors once forgotten, or the meaning of roots from which the words were derived once dimmed and changed, the words themselves become insignificant. This would not matter so much in Arian languages, where people soon learn to look upon nouns as symbolic signs, without much reference to their etymological meaning. But in the Turanian languages, properly so called, the number of nouns belonging to this class must always be comparatively small.

§ 2. *Adjectives, Substantives, and Verbs not always distinct.*

In the Turanian languages many words are still uncertain between substantives, adjectives, and verbs; that is to say, *their radical meaning is still so free and general* that they can be used as subjects and as predicates, and, therefore, as nouns, adjectives, and verbs. Thus we read in Boehtlingk's Yakute Grammar (§ 238.): "The substantive is not treated as separate from the adjective, because they are frequently the same." If the adjective takes the terminations of declension, it becomes a substantive; as adjective it has no grammatical suffix, but is put before the substantive, as in a Sanskrit compound. For instance, Hungarian *A' szep virágok*, the beautiful flowers. Here the plural termination (*k*) is put to the substantive only. But *A' kések életlenek*, the knives are blunt. Here the plural is expressed both after the substantive and the predicate. We may compare such phrases as "our knives" and "the knives are ours;" but they are different in origin. The same process which in the Turanian languages raises an adjective to a substantive, may also transform it into a verb. In Hungarian, according to Revay, *fagy* signifies both "frost" and "it freezes." *Lak* (now only used in composition) meant "habitation;" and if followed by a pronoun, it becomes a verb, *lak-ik*, habitat. "In the infancy of language," to quote Revay's explanation of these forms, "the forms *fagy-en*, *fagy-te*, *fagy-ö*, arose from the inartificial annexation of the pronoun, the radical having both the force of the noun and of the verb, when

predicated of persons: primarily denoting *gelu* ego, tu, ille, instead of *gelu* meum, tuum, suum, and then *gelasco, gelascis, gelascit.* Afterwards, by a more perfect formation which is still in use, a distinction was made between them in this way; namely, that *fagy-om, fagy-od, fagy-a* or *ja,* my cold, thy cold, his cold, *lak-om, lak-od, lak-ja,* my place, thy place, his place, were employed as nouns, and *fagy-ok, fagy-oz, fagy,* I freeze, thou freezest, he freezes, *lak-om, lak-ol, lak-ik,* I dwell, thou dwellest, he dwells, as verbs." The insufficiency of this explanation has been pointed out by Garnett, and we shall have to examine it hereafter; but still Reváy's observations are valuable. In Yakutic, "frozen" is *ton;* but followed by subjective suffixes, it also means "to freeze." *Tin,* in the same dialect, means breath; but followed by verbal terminations, it becomes a verb, to breathe. Substantives even which have lost their appellative nature, and are real nouns, are verbalized by the mere addition of these subjective suffixes. "Agha" in Yakute means father; the same word is raised to a verb, "I am father," by simply appending the subjective pronouns, without any intermediate verbal derivative. "Min agha-bĭn," means I am father; "ăn agha-ghin," thou art father; "kini agha," he (is) father. In the same manner the root sanâ, which as a root may mean thinking, thought, or thinker, is conjugated sanî-bin, I think, sanî-gĭn, thou thinkest, &c. The only difference here consists in the final vowel of the base. Even inflected bases are carried along by the powerful current of verbal formations in these dialects. For instance, "jiä," in Yakute, means house; "jiäghä," in the house; hence "kinilär jiäghälär," they are at home (Yakute Grammar, § 419.). In Mandshu, the number of words which have no distinctive termination is considerable, and the same bases may be used there as nouns, verbs, adverbs, and even as particles (Gabelentz, p. 19.). In Chinese, owing to the absence of all derivative elements, the identity of verbal and nominal bases is absolute. Not so, however, in the modern Chinese dialects. In the Shanghai dialect the use of a noun to express the verbal idea, and vice versâ, is rather an exception than a rule. A noun is not transformed into a verb without its proper change of form by suffix, not merely by change of tone, as in the general language of the country. And in like manner the verb does not take the form of the verbal noun, ex-

cept by the addition of a formative particle.* The Bhota and Bhotánta languages have certain distinctive particles for nouns and verbs; yet many words are still nominal as well as verbal. In Burmese, *nê* means to remain, to last, and the sun; *mai*, to be dark, to threaten, and the indigo plant. Humboldt, when speaking of these Burmese roots, says (p. 345.): "They are really Chinese roots, but they show unmistakably an approaching similarity to Sanskrit roots. Frequently these so-called roots have without any change, a nominal meaning, but their verbal meaning shines through more or less distinctly." This similarity with Sanskrit roots may seem a bold assertion; but traces of the same indeterminate character of bases, nominal and verbal, can really be discovered in Sanskrit, though, of course, on a limited scale. Vâ*k*, in Sanskrit, if followed by the case terminations, means speech; genitive, vâ*k*-as; dat., vâ*k*-i; abl., vâk-shu. Va*k*, if followed by subjective suffixes, becomes a verb and means to speak; va*k*-mi, vak-shi, vak-ti, I speak, thou speakest, he speaks. In composition the same word vâ*k* is used almost like an adjective. For instance, kalaha, disturbance; vâk-kalaha, quarrel. The difference between verbal and nominal bases is marked here only by the quantity of the radical vowel. In Latin also the same observation may still be made with regard to voc-s, voc-is, on one side, and voc-o, voc-a-s, voc-a-t, on the other; only that in voc-a-s and voc-a-t the intermediate *a* indicates the verbal nature of the compound, and thus distinguishes noun and verb.

§ 3. *Pronominal Affixes, subjective and predicative.*

Now, it should be observed that, in the Arian languages, where, with few exceptions, the distinction between nominal and verbal bases is drawn most carefully, there was really much less necessity for it, because these languages never employ possessive or predicative suffixes after nominal bases. A base, therefore, if followed by a pronoun, would at once be recognized as a predicate in these languages, and no ambiguity could ever arise, even if the base by itself might mean "speech," "speaker," and "to speak." The compound, i. e. the base,

* Cf. J. Summers's Translation of St. John, p. vi.

together with the pronoun, would always mean "I speak," and never "my speech." Every base followed by a personal pronoun in the Arian languages is verbal. An ambiguity arises, however, in the Turanian and Semitic languages. Here two sets of pronominal suffixes are used; the one subjective, added to verbs, the other predicative or possessive, added to nouns. I call *subjective* the pronominal suffixes which Castrén calls predicative, and *predicative* those which he calls possessive. The reason for this change of terminology is obvious. A pronoun, if appended to a noun substantive or used as a possessive suffix, is always predicative. This applies to every language without exception. In the Egyptian *si-f*, his son, *si*, son, is the subject, *f* is the predicate. But if a pronoun is attached to a base really verbal, or if it is used as what is commonly, but erroneously, called a predicative suffix, the pronoun is always the subject, and the verbal base is the predicate. In the Egyptian *iri-ef*, he does, *ef*, he, is the subject, which is qualified by *iri*, doing. We may change the verb, and the subject remains the same; but the subject shifts as soon as we change the pronoun.

The Semitic languages also employ their pronominal affixes to mark the persons of the verb: I love, thou lovest, he loves; and to express the persons of the noun: my house, thy house, his house. The one and the other class of pronominal affixes are attached to the end of words, and in some cases they differ but slightly, or not at all, as in the third person feminine of the singular, which is "âh" both after nouns and verbs.

The Arian languages, on the contrary, have never possessed more than one set of pronominal affixes, and these are used to mark the persons of the verb. Instead of predicative affixes, they use their genitives, μοῦ, σοῦ, or independent possessive adjectives, μός, σός. Compounds such as Egyptian si-k, son-thou, i. e. son of thee, thy son; or Hebrew, lebush-kâ, dress (of) thee; or Hungarian atya-m, atya-d, atya, my, thy, his father, are impossible, nay inconceivable, to an Arian mind. If a compound is to be formed wherein the pronoun is the predicate, the Arian mind is forced to put the pronoun first, and thus we find, indeed, in Sanskrit, but in no other Arian dialect, predicative pronominal *prefixes*, such as, mat-putra, tvat-putra, tat-putra, my, thy, his son; but never predicative *affixes*.

There is one solitary exception to this general rule, which deserves to be pointed out, the Persian. The Persian is the only instance of an Arian language where in all compounds the predicate can be put first. We say in Persian "puser-i-dost," the son of the friend, which, if expressed as a compound in any other Arian dialect, would have to be expressed by "dost-i-puser." The only way to account for this direct violation of the genius of the Arian grammar in Persian is to ascribe it to the influence which the Semitic language and literature exercised on the inhabitants of Persia from the time of Cyrus up to that of Firdusi. If the Persian could once break his mind into the Semitic fashion of placing the subject in a compound first and the predicate last, it was but another step in this direction to do the same where the predicate is a pronoun, and thus we find in Persian a set of predicative affixes attached to nouns in the same manner as in Semitic languages. We say in Persian, not only dil-i-keniz, the heart of the maid, but

dil-i-men, my heart,
dil-i-tu, thy heart,
dil-i-o, his heart.

Here "men," "tu," "o," are the regular personal pronouns. These, however, may be abbreviated again, and in some instances be replaced by distinct pronominal affixes, so as to give

dil-em, my heart,
dil-et, thy heart,
dil-esh, his heart.

Another instance where predicative pronominal affixes seem to occur in an Arian dialect, is an exception only in appearance, for it would be wrong to compare these really anomalous forms with expressions such as we find in the secondary formations of the Arian languages: I mean the Italian "fratelmo," my brother, "patremo," my father. Though "fratelmo" may seem a compound hardly differing in principle from the Persian "dilimen," my heart, it is necessary to observe that "fratelmo" is only an abbreviation and corruption of "fratellus meus," or rather of "fratellum meum." Now it is clear that, as soon as two words have once been articulated by indicatory terminations

such as "us," the speaker is at full liberty to place the predicate either before or after the subject. Even if the pronoun is not yet an adjective, agreeing in gender, number, and case with its subject, but is distinguished only by the termination of the genitive, all restrictions which were felt with regard to the collocation of words in compounds, will naturally disappear. Let us only consider what is meant by what we call a genitive, and we shall see that a language which expresses the genitive at all is as free with regard to its collocation as it is with adjectives.

The genitive in most languages is an adjective, only as yet without terminations to mark case and gender. But the adjective again is generally a derivative where, by means of a pronominal affix, the quality, action, &c. expressed by a noun is grafted on a pronominal subject. In Sanskrit, "dakshiṇâ" means the south; and if we add to it the pronominal base "tya" (syas, syâ, tyad), we get "dakshiṇâ-tyas," he from, of, or in the south, i. e. southern. Πόλις in Greek means city; and if we add to it the same pronominal derivative, we get πολίτης, "urbanus," "civis." Sometimes this pronominal derivative is only a short a; as Sk. manas, mind, mânas-as, what belongs to the mind, Greek πίστις, trust, πίστι-ος, trusty. The difference between a genitive and an adjective can best be shown in Sanskrit. In Sanskrit the neuter sáhas, strength, forms the genitive sáhasas. This genitive is the most general predicate, and its termination remains the same, whether the subject to which it refers be in the singular or plural, masculine or feminine, nominative or accusative. We may say "sáhasas patis," the lord of power, and "sáhasas patim," the lord of power (accus.), the genitive only expressing sáhas, power, as a predicate of something. But if we express in sáhas-as, not only the predicate, but gender, number, and case, the genitive becomes changed into an adjective; and instead of saying "sáhasas patim," the lord of strength (accus.), we now say "sahasám patim," the lord powerful, both words being in the accusative. The regular genitive of words like πίστις would be πίστι-ος (instead of πίστεως); and if we make this genitive express gender and case, we get πίστιος, ια, ιον. The usual Sanskrit genitive in "sya" is probably but another form of the pronominal base "tya," which we had in dakshiṇâ-tya, only that the former cannot be raised to an

adjective, while the latter takes the exponents of gender and case. What we express is nearly the same, whether we say a bird of the water, or an aquatic bird. The adjective aquatic we should express in Sanskrit by âp (water) + tya (âptyas, â, am); the genitive, by udaka, water, + sya, "udakasya," of the water. Both forms, genitive as well as adjective, mean originally and etymologically "water-there," and "water-there-he, she, it," taking the local adverb "there," as the nearest approach to the radical meaning of the demonstrative pronoun. Here, then, we clearly see the contrast between Semitic and Arian grammar. In Hebrew we can say first, as it were by one act of intuition, malk-i-zedek, king-justice. In Sanskrit we say dharma-râ*ga*, justice-king. Secondly, we can turn it into a phrase and say in Hebrew, ben o Beor, the son-he Beor, i. e. the son of Beor; or still more clearly in Ethiopic, anqaz enta samây, "porta ea cœli," anqaz being feminine, and "enta" being the feminine pronoun. In Sanskrit, on the contrary, we add the pronoun to the predicate, and say râ*g*â dharma-sya, "the king justice-there," i. e. the king of justice; or we actually form an adjective (and every genitive in Mahratti, for instance, is an adjective distinguishing gender and case), and say "rex justus," or "regina justa." If a language has once formed genitives and adjectives, it is no longer under the restraint of what we might call the national logic differing thus in the Semitic and the Arian race. Without grammatical exponents the Hindu can only say "râ*g*a-putras," king-son, or "tvat-putras," thy son. But as soon as we form the genitive, we may say "tava putras," or "putras tava;" and with the adjective, tâvakas putras or putras tâvakas, or, in Latin, frater meus and meus frater. Phonetic corruption may afterwards reduce the adjective to the state where instead of "meus, mea, meum," for instance, we have only "mo" for all cases and genders. Still "mo," in fratelmo, occupies its place only as a degenerate descendant of "meus." It follows the subject as a pronominal adjective, but it does not enter as a predicative pronoun into composition with a substantive, like the Persian dil-em, my heart.

What has been said with regard to fratelmo applies with equal force to such compounds as "Hôtel-Dieu." They may be used to illustrate the Semitic mode of thinking; but grammatically "Dieu,"

in "Hôtel-Dieu," is the Romance genitive or casus obliquus, and only as such could it remain in a few expressions without requiring the new sign of the genitive, de. In the Oath of Strassburg we have "pro deo amur," "deo" being the casus obliquus, while in the same document the nominative is "deus."*

With the exception of Persian, therefore, and after the discovery of the cuneiform inscriptions, we may say, with the exception of modern Persian, no Arian language employs personal pronominal affixes except after verbs.

§ 4. *Means of distinguishing nominal and verbal Bases in Turanian Languages.*

To avoid the confusion, which would naturally arise if roots can be used nominally and verbally, and if pronouns can be attached to them as subjects and as predicates, languages have at a very early period resorted to various expedients. Instances occur where languages really do not distinguish between *asinus ego* and *asinus mei*. For instance, when the definite conjugation is employed in Hungarian, *ir-om* may mean *unguentum mei*, or *scribo; lep-em, tegimen mei* or *tego*. In modern Hungarian, *esö* denotes *pluvia*, and *es-ik, pluit;* but in the fifteenth century the simple root *es* was employed in both senses. There can be little doubt, as Garnett remarks, that at an early period this identity of the verbal root with the noun was a general law of the language. At present the abstract noun in Hungarian commonly differs from the simplest form of the verb by the addition of a syllable, usually *as* or *at:* e. gr. *ir*, scribit; *iras*, scriptio; *ir-at*, scriptum. In languages without a formal distinction between nominal and verbal roots, care has generally been taken not to use a root, once sanctioned as nominal, for verbal purposes. Thus it happens that a root is sometimes used in one dialect for verbal, in another for nominal purposes only, but not for both in one and the same dialect. (See Yakute Grammar, § 236. note 71.) The pronominal suffixes might by themselves have served as a guarantee against a confusion of nouns and verbs, if their subjective and predicative forms had been kept sufficiently distinct, because, as a general rule, bases followed

* Diez, Altromanische Sprachdenkmale, 1846

by predicative suffixes would be nominal; if followed by subjective suffixes, verbal. But to do this was almost impossible, from the very nature of the pronominal suffixes. In some languages they are identically the same, whether used as subjects or as predicates, or, as we should say, as nominatives or as genitives. In the Tungusic class, no distinction exists, so far as the pronominal affixes are concerned, between *pay of mè*, i. e. *my pay*, and *pay I*, i. e. *I pay*. But again, even where there is a formal difference between these two sets of pronominal suffixes, this difference could never be very considerable, because both, after all, must be derived from the same pronouns; the subjectives mostly from the nominative, the predicatives from an oblique case.

Languages, therefore, as soon as they began to care at all for logical distinctness, were obliged to put a stop to the promiscuous use of nominal and verbal bases. They were driven to distinguish in every root the verbal from the nominal pole by some mark more distinct than what was furnished by the slight variations of pronominal suffixes. In the Turanian family the Yakute language makes a most favourable exception, for in it final letters are in most cases sufficient to mark the verbal or nominal character of a base. In Turkish we can only distinguish by accent between "güzelim," my handsome one, and "güzelim," I am handsome.

§ 5. *Means of distinguishing nominal and verbal Bases in Arian Languages.*

In the Arian languages, although none but subjective suffixes were used, it was felt expedient to distinguish a verbal from a nominal base. The most primitive tenses in Sanskrit are the perfect and the aorist. They are formed from the root not burdened as yet by any Vikaranas, i. e. distinguishing verbal marks. The perfect in Sanskrit was originally a present; it became the perfect, in our sense of the word, only after the introduction of a new special form of the present. Every Sanskrit root, in order to be used for verbal purposes, was originally raised to a perfect; that is to say, its initial letter was reduplicated. This is as clear in Greek as in Sanskrit, and the number of perfects not restricted as yet to a past tense is considerable in both languages. In Sanskrit we have a root *tan*, to stretch. If employed for verbal

formations, this root was originally reduplicated and became *tatan*. To this verbal base subjective pronouns were attached, thus giving *tatân-a, tatan-tha, tatân-a*, I stretch, thou stretchest, he stretches, restricted as yet in time neither to the present nor to the past. In Greek, if we take the root MNA, *to remember*, we see that, in order to adapt it for verbal employment, it has to be reduplicated first, after which subjective pronominal suffixes are added, and the new compound *μέμνη-μαι* takes the sense of *I remember*.

But although this process of producing verbal bases as distinct from nominal bases was probably one of the most ancient, it was by no means the only one employed, in the Arian languages. Every one of the numerous Vikaranas in Sanskrit, Greek, and Latin is really a derivative element (a verbal Unâdi, as Pânini might call it) put aside for verbal purposes. If we add to the root tan, in Sanskrit, the Vikarana of the eighth class, we get tan-u, which again, followed by subjective pronouns, gives us tano-mi, tano-shi, tano-ti, or tan-e, tanu-she, tanu-te, in the sense of I stretch, thou stretchest, he stretches. The same in Greek, where from the root TAN we get not only *τανύω*, but, by other Vikaranas, *τείνω* (i. e. *τενιω*), *τιταίνω*, &c. These Greek Vikaranas have been exhibited in a most lucid arrangement by Geo. Curtius. ("Bildung der Tempora und Modi, 1846.") It was owing to the introduction of these new bases, such as for instance *τύπ-τ-ω* instead of *τέτυφα* (*i. e. τε-τυπ-ά*), that the old reduplicated forms took the sense of perfects. It was the absence in them of all distinguishing marks which excluded the old reduplicated forms from the present *κατεξοχήν*, while most of the Vikaranas, expressing either inchoative activity, or participal quality, or motion, or continuity, were eminently fitted for expressing an action actually present.

Without entering as yet into the formation of the real preterite of the Arian languages, — I mean what is called the second aorist in Greek, and the multiform preterite in Sanskrit, — it would be of interest to see how other languages gained the same point, — that of forming the first verbal base—which the Arian accomplished by reduplication of the initial letter. In Chinese, we have no right to expect anything of this kind; but in the Turanian family, the Yakut has already been mentioned with distinction, in so far as it fixed some

and discountenanced other vowels at the end of verbal bases as a means of distinguishing nominal and verbal radicals.

§ 6. *Means of distinguishing nominal and verbal Bases in Semitic Languages.*

In Tibetan, and its cognate languages spoken in the Sub-himalayan districts, many nominal bases become verbal by a mere repetition of the final letter: as *nág*, black, *nág-go*, it is black; *sum*, three, *sum-mó*, it is three. The present definite is always formed by reduplication of the final letter, whether consonant or vowel: as *jyed*, to do, *nga jyed-dó*, I am doing. However distant these dialects may appear from the language of Homer, I am inclined to consider their final reduplication as prompted by the same motive which led the Arians to the reduplication of the initial letter of their roots. The repetition of the whole or part of a root was felt as the most natural expedient to express continuity, activity, or motion; in fact, to express what Aristotle calls the distinctive point between verb and substantive, time.*

If then the Arian languages, though they used pronominal suffixes after verbal bases only, if the Sub-himalayan languages, though they used hardly any pronominal suffixes (excepting only some more advanced member, like the Nága dialects), were driven to invent distinctions between nominal and verbal bases, much more must this want have been felt by the Semitic nations. With the little difference between their subjective and predicative suffixes, measures of a much more general character were necessary, if confusion was to be avoided. Might not, therefore, the extraordinary idea taken up by the Semitic languages evidently at a very early period, — for it is common to all Semitic tribes, — of reducing all verbal bases alike to a triliteral appearance, be accounted for by the same motive? It is against the genius of Shem to reduplicate an initial consonant, and there is no real Semitic root beginning with twice the same letter. But the final letter could be reduplicated, and the verbs ghain-ghain

* See Aristotle, Poetic. c. 20. De Interpr. c. 2. Lersch, Sprach-Philosophie der Alten, ii. p. 13. *Ὄνομα μὲν οὖν φωνὴ σημαντικὴ κατὰ συνθήκην ἄνευ χρόνου. Ῥῆμα δέ ἐστι τὸ προσσημαῖνον χρόνον.* In German the only word for verb is "Zeitwort."

show how frequently it was. I do not say that reduplication was the only means of distinguishing verbal and nominal bases in Hebrew. Other expedients were at hand, as various as the Vikaraṇas of the Arian languages. In the Arian languages these Vikaraṇas are generally put at the end of a root; but nasals, and nasals with vowels, are inserted in the middle of roots, in order to transform them into new verbal bases. Thus yu*g*, to join, becomes yu-na-*g*-mi, I join. The same and many other ways were open to the Semitic dialects. Now it is, I believe, admitted by all Semitic scholars, that the radicals of the Semitic family were originally biliteral; the point on which they differ is only the method by which triliteral roots can be traced back to their more primitive biliteral state. Fürst adopts the rather severe process of simply beheading the triliteral roots; Klaproth adopts the other alternative, and proposes to cut off their tails. The best that can be said on the subject was said by Ewald, in 1827. "It is even possible," he says (Grammar, § 95.), "to reduce the full-grown triliteral bases to shorter radicals, from which all secondary bases were derived, as their meaning became more and more different. For instance, the triliteral roots, qâʒaʒ, qâʒâh, qâʒab, qâʒar, may all have sprung from the short qaʒ, to cut. And here it should be observed, that roots, where only the final letter is reduplicated or where a soft consonant has been added, stand nearer to the primitive radical and are more related to one another than those which are distinguished by the addition of a strong consonant. A comparison of such roots, carried out with ingenuity and caution, would lead to many new results; but it should be remembered that, in etymological researches of this kind, we transcend the limits of the peculiarly Semitic language and grammar."

Now, it is true that, in the present state of Semitic language, all bases, whether verbal or nominal, are alike triliteral, and that therefore it might seem as if the reason assigned above for the creation of triliteral roots were not commensurate to its effect. But while there is not a single biliteral verbal root in actual use among the Semitic tribes, there still exist some biliteral forms; and they belong invariably to old nouns, or to still older pronouns. Some of these nouns are without any verbal analogy or etymology. Others are now derived from verba geminantia, hamzata, quiescentia; but with them,

if there is any real ground for derivation, the opposite process would generally be the more natural. No scholar could seriously think of deriving *âb*, father, from *abah*, voluit; *ben*, son, from *banah*, ædificavit; *kol*, all, from *kalal*, circumdedit. After the Semitic mind had once imbibed the triliteral character of its predicative roots, biliteral roots were eliminated in the most sweeping manner. Even pronominal bases were made triliteral, whether by additional syllables, or by changing mere vowels into semivowels. New substantives could, of course, be formed from verbal roots to any amount; and as these new words were more expressive and intelligible, and could be sufficiently distinguished by peculiar vocalization from the different forms of conjugation, they well nigh supplanted all ancient monosyllabic nouns. Now, there must have been a reason for this thoroughgoing change; and I cannot believe that the first start can be explained simply on phonetic or rhythmical grounds. It is true that peculiar features in a language are sometimes perpetuated which owe their origin to the mere fancies or crotchets of one patriarchal i. e. specific, (εἰδοποιὸς) individual. But in the case before us we may observe analogous tendencies in languages not Semitic in their origin; and I venture, therefore, to rest my argument for the original *verbal* character of triliteral roots on these four points:—

I. According to the Semitic system of grammar and orthography, there is now not a single root which is not triliteral.

II. Nouns and pronouns exist which sometimes in writing, and more frequently in pronunciation, are decidedly biliteral.

III. Triliteral nouns are mostly secondary verbal formations, and therefore in many cases not absolutely identical in all Semitic dialects. They mostly differ in different dialects by verbal derivation and vocalisation.

IV. In many cases the character of the additional litera tertia, whether initial, medial, or final, is sufficiently marked by this, that it is either a semi-vowel, or nasal, or sibilant, or a reduplicated letter. It frequently varies in different Semitic dialects, while the two radical letters remain the same. I shall give one instance —one not the less instructive because it has been pointed out many times before, and first, I believe, by Klaproth.* If we

* Principes de l'Étude Comparative des Langues, par le Baron de Merian; suivis

take the usual Hebrew paradigm qâ*t*al, he strikes, it can easily be proved that the *l*, as a semi-vowel, is here the litera tertia, and must give way. This leaves us qa*t*, which in Hebrew shows itself again in *qe*ṭ*el*, destruction, and with the change of *Têt* into Ȝâde, as qâȝâh, qâȝaȝ, qâȝab, qâȝar, &c. In Arabic this root has been most prolific. We get qa*tt*a, qa*t*aba, qa*t*a'ha, qa*t*afa, qa*t*ala, qa*t*ama, qadda, qadḥdḥa, qatḥtḥa, qaȝȝa, qasama, qaȝaba, qaȝada, qaȝara, qaȝama, qaȝmala, qaȝȝa qaȝqaȝa, qaȝaba,—all in the sense of cutting, striking, killing, dividing, breaking, biting, &c. How true it is, as Ewald remarks, that, by following out etymological researches of this kind, we transcend the limits of language, peculiarly Semitic, is shown by this very instance. The Hungarian *kés*, knife, the Mongolic kese, to cut, chasu (tailler), the Turkish *kesmek*, cutting, the Garo ḳethali, knife, show us that we are on ground common to the Turanian; the Sanskrit *sas*, and Latin cædo, that we are on ground common to the Arian languages. This is by no means a solitary instance where a root, after removing its various increments, or, so to say, divesting it of its national dress, can be reduced to that form in which it may be considered as a radical, common to all human speech. We must not expect to find roots common to Semitic, Arian, and Turanian languages, except those which express the simplest material impressions. But roots like LAK, to lick, MAR, to decay, ZAR, to tear, TAR, to transgress, SAR, to go, TAN, to give, &c., may safely be considered as common property. No doubt they approach, in this abstract form, very near to interjections, or mere phonetic imitations; but still there is a well-marked difference between these roots and interjections. An interjection never grows, but is but the momentary outcry of a material impulse; while a root is the conscious and intentional expression of an impression, remembered and fixed on the human mind. It is owing to this ideal character that a root is capable of entering into the most various processes of assimilation and combination. The root LAK, for instance, in Hebrew has taken the triliteral form lâqaq. In Arabic we have:

la'hiqa, to lick.	lasama, to taste.
la"hâ, to speak.	la*t*a'ha, to lick.

d'Observations sur les Racines des Langues Sémitiques, par M. Klaproth.—Paris, 1828.

lahata, to exercise the tongue.	lâsa, to taste.
lagana, to lick.	lahasa, to lick.
lassa, to lick.	lisn, the tongue.
lasaba, to lick.	lasa'ha, to be maligned.

The same root exists as "lih" in Sanskrit, as λείχω in Greek, as "laigon" in Gothic, as "ligh" in Celtic, and in Latin "lingua." Again, with the frequent transition of *l*, the dental semi-vowel, into *d*, the dental media, we find, corresponding to the Latin lingua, or dingua, the Gothic "tuggo," and the English "tongue." That the word "glossary" should have grown out of this root LAK, may seem startling; still there is not a link wanting to connect the two words either in their form or in their meaning. Turning to the Turanian languages, we find the Finnic lakkia, to lick, though it may be doubted whether Mangu leke, to polish, Finnic laaha, the same, or Finnic lau, to speak, could safely be referred to the same source.

§ 7. *The three different Directions of Grammar, Turanian, Semitic, and Arian, represented by the three Sons of Feridun, Tur, Silim, and Irij.*

A. *Tur.*

As we have thus been carried back to times when we see the three principal tongues, which we may represent as the three sons of Feridún, as not yet separated, it may be of interest to catch at least one glimpse of them as they are leaving their common home and starting off in different directions. What they carried away from home were roots and pronouns. Two of them, Silim and Irij, seem both to have held the secret how a root could be divided and changed so that it might be used as a subject or as a predicate. Túr also may have known it; but he either forgot it, or he did not like to tamper with those sacred relics which he had carried away from his father's house. Under his care they remained the same, without addition or diminution; and when they had to be used, they were only set and framed like precious jewels, but neither divided nor polished down.* Now there were at least four things which Tur had to express with his roots and pronouns. If he possessed a

* Conf. pag. 286.

root for cutting, he wanted to say, I cut (present); I cut (past); cutter, i. e. knife; and my cutter, i. e. my knife. These four little phrases were indispensable for him if he wished to get on in the world. As long as he was alone with his family and children, he no doubt could make them understand by some expressive accent when ngò.tà (moi battre) meant "I beat," and when ngò-tà meant "my stick" (moi-bâton). What followed would generally remove all uncertainty, if it existed; for ngo.ta.ni, I-strike-thou (moi battre vous), could only mean "I strike thee." Again, as he could express *to-day* by "this light," and *yesterday* by "that light," perhaps his wife and children were not slow in understanding when he said kin-tien ngo.ta, this day I strike, i. e. I strike now (tout à l'heure moi battre); or tso-tien ngo.ta, that day I strikè, i. e. I struck (jadis moi battre).*

All this may seem so natural, as far as construction goes, that at first one hardly discovers any thing peculiar in these different modes of expression. Still, in the construction of these two expressions, ngo.ta, I beat, and ngo-ta, my stick, there is something so individual and peculiar, that neither Silim nor Irij could imitate it. This is the liberty of putting the predicate first in one sentence and last in another. Silim could say ngo.ta, I beat (*ė.qtol*), but never ngo-ta, my stick. He would have to put the predicate last in both phrases, and say ta-ngo, stick of me, like *ė.qtol*, I-striking. Irij again, at least in his early youth, could say ngo-ta, my stick (mad-*danda*), but never ngo.ta, I-striking. Instead of this he had to say striking-I (tudâ.mi). This peculiarity by which Tur put the predicate sometimes first, sometimes last, may originally have been involuntary. As his roots were not yet distinguished as nominal and verbal, as subjective and predicative, his ngo.ta, I strike, may not have been meant for I striking, but, like ngo-ta, my stick, for my-striking. Still we shall see that, among his descendants, even after they had learned to distinguish between nominal and verbal roots, and between subjective and pre-

* "Qu'un étranger me dise, 'Moi avoir soif, moi vouloir boire, moi désirer manger,' je comprends ce langage; mais je ne puis m'empêcher de sentir que c'est un langage sans vie, sans nerf, sans liaison. Pourquoi? Parce que l'âme du discours, la force unitive, le nœud de la proposition, l'essence du jugement, le verbe en un mot s'y fait désirer, malgré la présence de l'infinitif."—*Dissertation Critique, par l'Abbé Darrigol*, p. 97.

dicative pronominal affixes, some retained the power of putting the subject first as well as last; such as agha-m, father of me, i. e. my father, and sanî.bin, knowing-I, i. e. I know. This applies, however, only to the Nor-Western descendants of Tûr; his other descendants place the predicate first always.

B. *Silim.*

Silim, as we saw, started from home fully aware that his roots might be made to answer two purposes. He therefore divided his roots into simple nouns and fuller verbs; also, he kept one set of his pronouns, which had already grown and multiplied around him, for his verbs, and another for his nouns. He had only one difficulty, which, with all his acuteness, he could not overcome: he could never think a predicate without first having thought his subject. Therefore he could say wrath (of) God, and wrath (of) me, but not God (s) wrath, and my-wrath. He also could say beating (of or to) me, i. e. I did beat, and I-beating, i. e. I beat, but not beating-I, i. e. I beat. The opportunity, however, which he had of forming at least these two verbal compounds, beating (of) me, and I-beating, was not lost by Silim; and as he found it essential to make his friends understand either that he had paid or that he meant to pay, he took the first form, paying (of) me, i. e. paying (belonging to me, or possessed and had by me), in the sense of the preterite, while the mere assertion of I-paying was left to answer the purpose of a present or a future payment.

C. *Irij.*

The mind of Irij was more comprehensive than that of Silim. He was able to think, as it were by one grasp, ideas such as "gold-piece," "God's love," &c., and he expressed them by a compound word, in which the predicate being second in thought, and therefore more present to his mind, came first in language. Now, as he could say God's love, μητρ-ο-πολις, father-land, Mahâ-râga, always putting the predicate first*, he could also say, I-love, I-wife, but only in the

* Ἱπποπόταμος, which is generally mentioned as an exception, is only a literal translation of an Egyptian word. On the difference between Ἀνδρόφιλος and Φίλανδρος, Τιμόθεος and Θεότιμος, Δωρόθεος and Θεόδωρος, see Pott, Personennamen, p. 88.

sense of my love, and my wife, because his first word is always the predicate. South of the "Snows" his descendants retained this manner of expression for many centuries. They said, mat-putra, tvat-putra, asmad-putra, my-son, thy-son, our-son. Their Northern brethren, however, found it more expedient to express the predicative nature of these pronouns more distinctly than could be done by mere position. They therefore formed an independent predicative form, whether genitive or adjective. This they were able to handle with greater freedom, so that they might now say τέκνον ἐμὸν as well as ἐμοῦ τέκνον. As to his verbal compounds, Irij had two ways opened before him, only just in the contrary direction to those of Silim. He could say loving-I, i. e. I love; and he did say so, after his verbal base had been qualified by reduplication or by Vikaranas. This compound phrase, however, was a mere predication, and could therefore hardly be restricted to any point in time, whether past, present, or future. It simply asserted a quality or an action. How then could Irij express his preterite? As he had as yet no auxiliary possessive verb, like the "habere" and "tenere" of his descendants, he could only use his possessive pronouns. But his possessive pronouns he could only use *before* a verbal base, while he was accustomed to mark all other formal changes at the end of words. Silim, when he found himself in the same dilemma, simply divided his pronouns in two, and put half before and half after the verb.* Irij had to do the same; but as he was putting his pronoun before the word, trying to pronounce ma-gâ, my-going, i. e. I went, the pronouns were so strongly attracted towards the end of the root, that all that remained in the place originally intended for the whole predicative pronoun was not even a distinctive consonant, as in Hebrew, but only a

* Ewald (§ 152.) explains the formation of the Hebrew Aorist in the following manner:—"The prefixes had to be pronounced as short as possible: one consonant, not even followed by a vowel, was all that remained of the prefixed pronoun. This consonant happened to be the same for several persons; confusion would inevitably have arisen, unless, by a very natural expedient, the pronominal prefix had been divided, so that the characteristic letters only remained as prefix, while the rest were thrown towards the end of the word. The pronoun of the second person sing. fem. being *a-tin*, *atin* was divided into at + in. *At* was shortened into *t* and prefixed, while *in* was suffixed, thus giving ti.qtel.î(n), thou (woman) killest.

strongly accented vowel, common to all these pronominal prefixes, and now called the augment; while the consonants, without their final vowels, were suffixed and placed at the end of the root. Thus, if there was a root *lip*, to write or paint, it could first be raised to a verbal base by reduplication. This verbal base *lilep*, writing, followed by predicative suffixes, would then give an aoristic compound, *lilep-a*, writing-I, I write, *lilep-itha*, writing-thou, thou writest. If afterwards a new and more actual verbal base was produced by the insertion of a nasal, such as *limp*, then, by the addition of predicative suffixes, *limpāmi*, *limpasi*, *limpati*, might be formed; and as these forms would express the present act of I am actually writing, the old present *lilepa* would in time take the sense of a perfect, I have written. The same root *lip*, however, being used as a subject, and not as a predicate, participating, therefore, more in the nature of a substantive than of an adjective, would, if preceded by possessive pronouns, express my-writing, i. e. writing belonging to me, i. e. I wrote, and thus á-lip-am (instead of ma-lip) would form the simplest and most primitive Arian preterite.

D. *The Descendants of Tur divided according to their Employment of the Pronominal Affixes.*

We have still to see how Tur proceeded in his verbal formations, as it is not likely that he could be satisfied with the Chinese juxtaposition of pronouns and words. Some of his descendants in Bhota and Bhotánta introduced formal elements to indicate the predicative or verbal nature of their roots; they formed their verbal bases, as we saw, by reduplication. They also used formal elements to indicate the predicative nature of their pronouns, and thus formed genitives, or pronominal adjectives. In Chinese already we have ngo-ti-sin, my heart. In ngo-ti-sin, *ti*, though originally it may have been a pronoun, cannot be compared with the Hebrew aser, or the Ethiopic za (masc.) and enta (fem.). In the Ethiopic mazmor za Dâwith, *za* is the masculine demonstrative or relative pronoun, referring to mazmor. It means the psalm which (to) David. But the Chinese min-li or min-ti-li expresses not the people which (is) power, i. e. the people of power, but people's power, where people's is the predicate, and therefore to be expressed either as the first

part of a compound or as an adjective. The late B. Garnett, in his valuable treatise on the origin of the Genitive, has not perceived this marked difference between Shem, on one side, and Japhet and Túr, on the other, and has tried to explain the Semitic and Arian genitive as the expression of one and the same logical process. In this he could not succeed; still his essay, like all he has written on comparative grammar, is very useful and important.

The Turanians, before they began to use their pronouns as suffixes or prefixes, could only form these two grammatical propositions— I-going (Bhot. ngá dó-ó), and mei pater (Mandshu, mi-ni ama). But after this period of their grammatical childhood was over, we are able to distinguish three divisions among the descendants of Túr, each marked by the peculiar manner in which they employed their pronominal affixes.

The first is the *Tamulian*, where subjective pronouns are always suffixed, and predicative pronouns always prefixed; where they say, as in Telugu, vaguta.nu, vaguta.vu, vaguta.du, speaking-I, thou, he, for I, thou, he speaks; and na-tandri, as it were me-pater, *i. e.* my father.

The second is the *Caucasian*, where likewise predicative pronouns are prefixed and subjective pronouns suffixed. For instance, Suanian, s-ab, w-ab, i-ab, my, thy, his father; and b-chask.a, chask.á, chask.as, I dig, thou diggest, he digs. In the first person of the verb, however, we see the pronoun put twice, prefixed as well as suffixed; and we also meet with a second verbal formation, where, as far as the very perplexing changes and additions of the Caucasian verbs allow us to judge, the pronoun was used throughout as a prefix; I mean such forms as the Lazian ma-zun, ga-zun, a-zun+asere, I ail, thou ailest, he ails. If in this verbal compound, the pronoun was originally and intentionally used as a prefix, we must take it as a possessive or predicative pronoun, and the tense itself for a preterite. The analogy in the formative process of Sansk. mat-pitar and Suanian s-ab, my father; Sansk. Khana.ti and Suanian chask.as, he digs; and Sansk. (m) agam.am and Lazian ma.zun, I ail, would then be complete. But whether this is so, or whether the Lazian *mazun* is altogether an impersonal formation, must remain uncertain until we get more ample information about the living languages of Colchis.

The third division is that of the *Altaic* Turanians. In them the method of joining roots and pronouns together is most intelligible and instructive. With the exception of the Samoiedic dialects, we hardly require new materials to enable us to judge of the mechanism of the Altaic suffixes. Castrén's work, "De Affixis Personalibus Linguarum Altaicarum" (1850), gives all the evidence that is required, carefully collected and arranged. I differ from him in one point only, and one which can easily be settled. All personal suffixes, if attached to nouns, he considers *eo ipso* as possessive, while all other suffixes are put down by him as predicative. These predicative suffixes, whether used after adverbs (as ende (here) + bi (I) = endebi; I am here) or after verbs (as tud.ok, I know), or after verbal adjectives (as sever.îm, I love), I call *subjective*, because they contain always the subject of a logical proposition. This, however, would only be a difference of terminology. But where I really differ from Castrén is in what he calls the second set of predicative, i. e. subjective, suffixes. These suffixes, whether they are used to express the preterite tense, or as exponents of transitive or definite verbs, are always (I only except the Samoiedic, of which too little is known to form an opinion) *possessive* suffixes, or *predicative* suffixes, in the sense in which I use this word, and they ought to be considered as a second set of possessive suffixes used after verbs, or rather after verbal nouns. In form they agree with the possessive suffixes, wherever these differ from subjective suffixes.

After this exposition, the mechanism of the Altaic pronouns is as simple, and at the same time as ingenious as can be. The Altaic Turanians differ from their brethren in so far as they put the predicative or possessive pronouns *after* the subject to which they belong. They say, as for instance in Hungarian and Tataric,

kés-em,	*my knife.*	u"hlu-m,	*my son.*
kés-ed,	*thy knife.*	*g*iftligi-ng,	*thy estate.*
kés-e,	*his knife.*	a"ha*g*-i,	*his tree*; ana-si, *his mother.*
kés-ünk,	*our knife.*	u"hlu-muz,	*our son.*
kés-tek,	*your knife.*	*g*iftligi-ngiz,	*your estate.*
kés-ök,	*their knife.*	a"ha*g*-ilari,	*their trees*; ana-lari, *their mothers.*

This applies to all Altaic languages, for not one of them puts predicative suffixes before the word. They agree therefore on this

point with Shem, and differ alike from Japhet and from the other descendants of Tur. For the latter even in their earliest days, though they allowed themselves the liberty of putting the subjective pronoun before the verbal predicate, never ventured to place the predicative pronoun after its nominal subject; and on the heights of Pamer, as well as in the sub-Himalayan basins of the feeders of the Ganges, they rather formed pronominal genitives and adjectives, which, as in Greek, allowed of a freer construction, but they never pronounced a predicate, even where it was a mere pronoun, after the subject.

With regard to the subjective pronouns, the Altaic Turanians agree with the rest. Subjective pronouns, without exception, are placed after their predicates, the verbs. Thus we say

in Turkish √sev, to love,	in Hungarian, √hall, to hear,
ben sewèr-im, *I love.*	hallok, *I hear.*
sen sewèr-sen, *thou lovest.*	hallasz, *thou hearest.*
ol sewèr, *he loves.*	hall, *he hears.*
biz sewèr-iz, *we love.*	hallunk, *we hear.*
siz sewèr-siz, *you love.*	hallatok, *you hear.*
onlar sewèr-ler, *they love.*	hallanak, *they hear.*

These forms, with subjective suffixes, invariably express the present; but they are also put to other uses, which vary according to the genius of different dialects. Before, however, we enter into this, it will be necessary to state another general feature of these languages. It is this, that "where they do employ different suffixes for the *preterite*, these suffixes are always originally *possessive* or predicative." This is what Professor Boehtlingk remarks, with regard to the Yakut predicative, when he says that the possessive affixes form the (predicative) affixes of the preterite; as min *suoghum*, my absence, or I was absent. For instance,

Tataric.		*Turkish.*	
ana-m,	*my mother.*	sewèr-d-im,	*I loved.*
ana-ng,	*thy* „	sewèr-di-n',	*thou lovedst.*
ana-si,	*his* „	sewèr-di,	*he loved.*
ana-muz,	*our* „	sewèr-dik,	*we loved.*
ana-ngiz,	*your* „	sewèr-di-n'iz,	*you loved.*
ana-lari,	*their* „	sewèr-di-ler,	*they loved.*

Hungarian.

vár-t-am,	*I waited (for it)*,	= késem,	*my knife.*
várták,	*thou waitedst*,	= késed,	*thy* „
várta,	*he waited*,	= kése,	*his* „
vártuk,	*we waited*,	= késünk,	*our* „
vártátok,	*you waited*,	= késtek,	*your* „
várták,	*they waited*,	= késök,	*their* „

In forming these verbal compounds, the Altaic languages felt none of the difficulties which perplexed the Arian in forming their preterites. They had already thrown off the spell which bound them in pronouncing the subject before the predicate — that is to say, they had thrown it off where the predicate happened to be a pronoun, though not when it was a noun; they therefore could express I have loved, by "loving had or possessed of me," or "love belonging to me." But some of them went beyond this. The Hungarian, for instance, considering that tud.ok, knowing-I, was a phrase in which *I* (ok) was the subject and knowing (tud) the predicate, very properly refrained from having any object, whether expressed or not, governed by the verb. Even transitive verbs, such as "I expect," were taken as intransitive if followed by pronouns to which they served as predicates. "Varok," where "ok" is the subject, and "var" the verbal adjective, would mean I expecting, I wait. Varom, on the contrary, where "var" is the verbal noun, and "om" the predicative pronoun, would always express I expect something, "var" conveying an action requiring an object, whether expressed or not. "Olvasok" would mean I read, i. e. I can read; but I read Cicero, would be Ciceret olvasom. This gives an entirely new character to the Hungarian verb; for the Hungarian mind, once accustomed to this distinction, carried it out also through the other tenses; and while in the present the two sets of pronouns (predicative and subjective) naturally offered themselves for these two distinct purposes (transitive and intransitive, determinate or indeterminate), further distinctions were actually introduced into the possessive pronouns, already occupied by the preterites, in order to distinguish in the preterite also between vártad, thou expectedest (it), and vártál, thou waitedest. In Ostiakian the possessive pronouns form transitive, the subjective pronouns intransitive verbs, though their difference

is distinctly perceptible only in the second person plural. The difference of the tenses must then be expressed by derivative elements attached to the verbal base. In Lapponian the possessives belong to the preterites, the predicatives to the present.

Before leaving this subject, which I confess has carried me away beyond the limits it ought to occupy in a general description of the prominent features of Tur, yet in truth of great importance, not only for Turanian grammar, but for grammar in general, I must still mention one fact, to show how the spirit of analogy runs through the whole system of conjugation and declension. We have seen that in Hungarian suffixed pronominal possessives could be used for forming definite verbs. If we knew nothing of the history of that large family of languages to which the Hungarian belongs, and if we only saw, that én várok meant I wait, én várom, I expect (something), we should say, like most Hungarian grammarians, that *ok* was the exponent of indefiniteness, *om* of definiteness. Its origin once forgotten, it would become, as it were, the "definite article of the verb." Now what is the origin of the definite article or the definite form in nouns? Lâta in Samoiedic means "board;" lâtada, "the board," and the final *da* is the possessive suffix of the third person, so that originally it meant, his board. But this has been forgotten,—and if we now want to express his board, we have to say, puda latada, which is really, he-his board-his.* (Castrén, De affixis, pag. 11, Syrjæn. Grammar, p. 55.) In Syrjænian again, what has been taken for the termination of the accusative, is really the possessive pronoun not of the third, but of the first person. Adzja mortäs, now means, I see the man, but originally meant I see my man; and that it was so, we can still see in the second and third person. For while adzya meam mort-äs, means "I see my man," I see thy man, would be adzya tead mort-tä; I take his knife, bosti sya purt-sä.

* Cf. Castrén. Ostiake Grammar §. 61. Boehtlingk, Yakut Grammar, p. 10.

Sixth Section.

Etymological Peculiarities of the Turanian Languages.

But it is time to leave the history of these formal elements, and to proceed to a consideration of the matter of the Turanian languages. I suppose we may carry away with us the conviction that many things in language which now seem formal were originally substantial.

§ 1. *Radical Meaning generally discernible.*

We saw above how the Turanian roots were kept as integers, i. e. intact and uninjured, though framed, enclosed, and grouped together in various styles, and fitted to express verbs, adjectives, nouns, together with the most abstract and derivative ideas. The etymological meaning of Turanian words is therefore more palpable than in the Arian languages. Still the dictionary of the Turanians also had gone through many editions before it fell into our hands, and we find in it dead and petrified words just as in their grammar: and many of them more difficult to decipher and to revive than the pronominal compounds which we examined just now.

§ 2. *Scarcity of ancient Words common to all Turanian Languages, and identical in Form and Meaning.*

What are called dead or petrified words are in general the most ancient parts of a language; they carry us back to that period during which they were young and full of life; and in cases where a separation of languages took place, they frequently constitute the common heirloom of different dialects, and serve as the strongest indication for determining and settling the exact degree of relationship between cognate tongues. The general aversion which the Turanian languages have against any thing unintelligible, dead, or corrupt in grammar or dictionary, explains the small amount of these ingredients in most of them. It is well known, for instance, that in the several branches of the Arian family, different degrees of family-life, from

father and son, down to brother-in-law and sister-in-law, have, in many cases, preserved their common Arian name. These words agree, not only in root and meaning, but — and this is important — in their individual derivative suffixes also. The word for father is not only derived, in all the Arian languages, from the same root, pâ, to protect, — not only was the meaning of this root raised in the same manner from that of protector to that of father, — but the same derivative suffix also, *tar*, was preserved by all the descendants of *Japhet*, thus distinguishing the language of Japhet from the Chinese *fu* and *mu* (father and mother), the Tibetan *po* and *mo* (male and female), the Subhimalayan *'bâ* and *mâ* (father and mother), the Burmese *pha* and *ami*, the Siamese *po* and *me*, and from all words similar in sound and meaning, whether in Asia, Europe, or Africa.

Many derivations from this root pâ were possible, such as Sanskrit pâlaka, protector, Vaidik pâyu, pâvan, &c. Pâ-tar, therefore, must be considered entirely as the result of one individual choice. To maintain a word of this kind, even when its origin became dim, not to allow it to be replaced by a new and more intelligible expression, was possible in an Arian, i. e. a social state of language, not among nomadic tribes, who lived only for the present, little concerned about past or future, without history and without ambition. Thus we find that in the Turanian dialects the number of common words is small. Rémusat, in speaking of the Mangu, says, "Je distingue trois sortes de mots dans la langue Mandchoue: les premiers lui sont communs avec celle des Tongous; ils expriment des idées simples, ou désignent des objets de première nécessité. Quoiqu'ils soient en assez petit nombre, ils n'en forment pas moins le fond de la langue. Une petite liste de mots essentiels mettra hors de doute l'identité du Mandchou et des différens dialectes des Tongous. La ressemblance d'un petit nombre de mots dans les langues des Mandchous et des Tongous, est d'un tout autre poids pour prouver leur communauté d'origine, que ne pourraient l'être les différences d'un plus grand nombre d'autres mots, si l'on vouloit en déduire la conséquence opposée." Professor Schott applies the same principle, only on a much larger scale, and for a different purpose: — "We ought not to despair about the affinity of these four great branches of languages (Tungusic, Mongolic, Turkic, and Finnic),"

he says, "although the words for the most necessary ideas in them are sometimes essentially different. The same remark might be made if we compare languages acknowledged to be sisters, nay, even dialects of the same speech. Tungusic as well as Finnic languages offer the most striking evidence." (page 44.) In a former article Professor Schott had pointed out the same fact in Indo-European languages. There, also, ideas and objects of daily occurrence have sometimes been found under different names in dialects, the close relationship of which cannot be doubted. For instance,

Sanskrit.	*Greek.*	*Latin.*	*English.*
1 putras,	2 *υἱός*,	3 filius,	4 son.
1 duhitar,	1 *θυγάτηρ*,	2 filia,	1 daughter.
1 bhrâtar,	2 *ἀδελφός*,	1 3 frater, *Sp.* hermano,	1 brother.
1 strî,	2 *γυνή*,	3 femina,	4 woman.
1 purûsha,	2 *ἀνήρ*,	3 vir,	4 man.
1 dyaus,	2 *οὐρανός*,	3 cœlum,	4 heaven.
1 prithivî,	2 *γή*,	3 terra,	4 earth.
1 *h*andra,	2 *σελήνη*,	3 luna,	4 moon.
1 *s*iras,	2 *κεφαλή*,	3 testa (tête),	4 head.
1 pâ*n*is,	2 *χείρ*,	3 manus,	4 hand.
1 vadanam,	2 *στόμα*,	3 os,	4 mouth.
1 vrikshas,	2 *δένδρον*,	3 arbor,	4 tree.
1 pakshî,	2 *ὄρνις*,	3 avis,	4 bird.
1 pâshâ*n*as,	2 *πέτρα*,	3 saxum,	4 stone.
1 arhas,	2 *ἄξιος*,	3 dignus,	4 worth.
1 kesas,	2 *θρίξ*,	3 crinis,	4 hair.
1 netram,	2 *ὀφθαλμός*,	3 oculus,	3 eye.
1 nadî,	2 *ποταμός*,	3 fluvius,	4 river.
1 asrik,	2 *αἷμα*,	3 sanguis,	4 blood.

In the Semitic family, Professor Schott has pointed out the difference between Hebrew and Arabic words, such as

yârêha,	gamar,	moon.
har,	gebêl,	mountain.
'hêz,	sagar,	tree.
ebhen,	hagar,	stone.

Even in languages whose relation to one another is not that of sister to sister, like Sanskrit, Greek, and Latin, but of daughter to mother, like French and Latin, we find the most common objects expressed by different words. For instance,

	Latin.		*French.*	*Italian.*	*Spanish.*
instead of	ignis,	we find	feu,	fuoco,	fuego.
	æger,	„	malade,	malato,	enfermo.
	anser,	„	oie,	oca,	oca.
	caput,	„	tête,	testa,	testa.
	discere,	„	apprendre,	apprendere,	aprender.
	domus,	„	maison,	casa,	casa.
	jecur,	„	foie,	fegato,	higado.
	lapis,	„	pierre,	pietra,	piedra.
	os,	„	bouche,	bocca,	boca.
	verbum,	„	parole,	parola,	palabra.
	via,	„	chemin,	camino,	camino.
	cogitar,	„	penser,	pensare,	pensar.*

It might be objected that in many instances a more careful study of these languages, and particularly of their ancient history and their dialects, would have enabled us to point out corresponding words even where the most usual expressions differ. It might be said that although the usual word for caput be tête in French, still caput could be identified with the French chef, or *vice versâ*, the French tête with Latin testa. Again, it might reasonably be remarked, that in the choice of our words from Sanskrit, Greek, and Latin, we have intentionally omitted synonymes which would establish an agreement between these languages.

If, instead of netram, oculus, we had taken the Sanskrit akshi; instead of pakshî, avis, the Sanskrit vi; instead of vadanam, os, âs,

* There are other words in Arian and Turanian languages, which, though they may be considered as common property, have suffered so much from a process of assimilation and accommodation in each dialect, that though we see a similarity, we hardly are able to recognise identity. I mean such words as wag-tail, which in German has been turned into Bachstelze, (brook-stilter), while in Italian it is translated into coditremola, in French into hoche-queue, in Greek into σεισοπυγίς and κίλλουρος. In Sanskrit the conception is different, for it is called there not "wag-tail" but "lame-walker."

the Sanskrit and Latin would have agreed. But it was our object to show how by the very fact of collateral expressions, or by the undergrowth of new popular names, the same diversity which strikes us in closely allied nomadic idioms can be detected, though in a smaller degree, between the members of the Arian family, nay, even between such languages as Italian and Latin. If the sudden irruption of a stream of nomadic tribes over the ruins of the Roman empire could stir up the whole basis of the Latin, and bring out again the long-repressed nomadic tendencies of an Arian language to such an extent as to change the whole surface of its words and its grammar, why should we feel surprised at similar results in languages where no literary or political centralisation has ever checked the superfetative tendencies of the human tongue? And further, if in the Arian words we had chosen our instances, not from the leading literary languages, like the Latin of Cicero and the English of Shakspeare, but from provincial dialects, under whose protection the nomadic life of a language continues often unobserved up to the present day, we should have been able to show a still greater approach between Arian fluctuation and Turanian unsettledness. Grimm, when speaking of the earliest periods of the German language, describes this most beautifully.* "The idiom of Nomads," he says, "contains an abundant wealth of manifold expressions for sword and weapons, and for the different stages in the life of their cattle. In a more highly cultivated language, these expressions become burdensome and superfluous. But, in a peasant's mouth, the covering, bearing, calving, falling, and killing of almost every animal, has its own peculiar term, as the sportsman delights in calling the gait and members of game by different names. The eye of these shepherds, who live in the free air, sees farther, their ear hears more sharply,—why should their speech not have gained that living truth and variety?"

§ 3. *Turanian Numerals.*

The Turanian Numerals, if considered from this point of view, tend to illustrate and confirm the principles which we before tried

* History of the German Language, p. 20.

to establish. They do so particularly if contrasted with Arian numerals. The Arian nations, it is well known, have preserved their ancient common numerals as the most precious gifts of their childhood. Even when rust and decay had disfigured and obscured their value and meaning, they were never parted with or replaced by new-coined words. The Turanian languages, though more careful of their numerals than of other words which could be thrown away at random, and replaced instantaneously, have not been able to preserve in every instance those common terms by which they first counted from one to ten. At first sight, a general similarity between the Turanian numerals is undeniable, unless we extend the limits of chance to an unprecedented extent. But, on closer inspection, it becomes clear that some dialects have lost their ancient numerals altogether, while others have lost them partially, and made good their losses by new-formed words. In some cases, the words particularly for one and two, we may admit the original existence of synonymes, from which each dialect selected its own pecular term. The same applies to the Arian languages, for, although a comparison of Sanskrit and Hindustani * numerals would convince every one how faithfully the Arian dialects in general maintain their linguistic conservatism, yet Sanskrit differs with regard to the words for "one," even from its nearest relative, the Zend, and both from Greek and Latin. The same applies to the Latin secundus, Greek δεύτερος, and Sanskrit dvitîya, —nay, perhaps to the Slavonic word for nine, — though here the difference may be explained on phonetic grounds.

That there are coincidences in the numerals even between Arian and Semitic languages, has frequently been pointed out; the difficulty has been to explain why these coincidences should be so palpable for six and seven, and hardly perceptible in other cases. But this admits of the same solution as the differences between several Turanian dialects, only on a larger scale. Some numerals were retained, and thus account for coincidences; others were entirely lost, and replaced after the separation of tribes or whole families, such as the Arian and Semitic. In the Brahvî we have, according to Pro-

* *Sanskrit* ekâdasa = *Hind.* 'igârch, *eleven.*
dvâdasa = „ bârch, *twelve.*
ûnavinsati = „ 'unîs, *nineteen.*

fessor Lassen's researches, a clear case of a language preserving its numerals for one, two, and three, but adopting all the rest from a foreign source. In the Magar language, the numerals from one to five have been preserved, and the rest taken from the Parvatîya. In the languages of the Dekhan, the native numerals and Sanskrit numerals are used promiscuously, which in time may lead to similar results.

§ 4. *On Phonetic Corruption.*

The numerals common to several dialects of the Turanian family are also instructive with regard to the extent to which phonetic corruption can be carried in a nomadic state of language. The reason why, with numerals and pronouns, the Turanian languages submit to a greater amount of phonetic corruption than they would tolerate in other words, is simply this, that nothing would be more difficult to re-express by any composition or derivation, than the simple ideas embodied in pronouns and numerals. Even where their body is emaciated, and their features distorted, they are retained, because even so more easily recognised by all than newly-invented substitutes would be. In the Turanian numerals, therefore, if compared together, we have what we could not expect to find otherwise in any of these ephemeral languages, — historical deposits of the progress and change of Turanian speech. While in the Arian languages, we may study the changes of letters, by comparing different phases of one and the same dialect, — as Sanskrit, Hindustani, Gothic, and English, we must here rest satisfied with comparing different dialects, even though the respective date when each has been fixed may remain indeterminate: we must compare languages which perhaps stand to one another as, for instance, Pâli to Italian, — two Arian dialects, which, though distant in time, are so analogous in their phonetic changes, that, if examined on phonetic grounds only, we might take them for twins. The possible phonetic changes in the Turanian dialects, are, of course, to their full extent, not yet determined, though much has been done for this by Professor Schott. And Professor Boehtlingk, in his Yakut grammar, has succeeded in reducing these phonetic changes

to something like law and order. Sometimes they seem greater than those admissible between Arian languages. Castrén, in his "Dissertatio de Affixis personalibus," considers k = t (p. 43.). He says (p. 49.) that a final t may be softened into a breathing, and this breathing again be hardened into a k. He frequently considers t and n interchangeable (p. 49.), and seems to hold the plural terminations, t, k (h), je', sañ, säñ, la, and ', identical in origin. In his Syriane grammar (§ 26.), he derives jas from äs, and compares this final s with Lapp. h, and Finn. t. Changes like these may appear fanciful, and, if transitions of gutturals into dentals, aspirates, and sibilants, were admitted as general principles applicable to every word at random, there would be an end to all scientific etymology. But there is a vast difference between the historical and the unhistorical application of such principles. Armenian hayr is the same as Latin pater, not because, as a general principle, p is changeable into h, but because it can be proved by facts to be so in Armenian, where pes (foot) is het; prithu (broad) is harth; pan*k*a, five, is hing; πῦρ, fire, is hour. Again, as mater becomes mayr, in Armenian and French, pater in Armenian must, or at least can be hayr. If we know that languages *are* historically connected, as, for instance, Latin and French, we can state as a fact, that lacryma can be changed into larme. We may even go a step beyond, and say that δακρυ tear, and larme are all derived from the same root. But if, on the strength of this, we were to assume that δακ could always be changed into *lar*, and hence identify the Turkish plural *lar* with the Tibetan plural *dag*, we should no longer be on historical ground, nor should we be working "in the spirit of Bopp's system."*

What has been said with regard to the numerals, applies, to a great extent, to the pronouns also. In the Arian languages, we know that the pronouns deviate considerably from the analogy of other nouns. Their terminations are called irregular, and in many cases their origin and meaning cannot be deciphered even by the help of Comparative Philology. The reason is, that in the declension of the pronouns the

* Cf. Hodgson, Journal of the A. S. B., 1853, p. 31, where what is meant by the "spirit of Bopp's system," refers, I suppose, to Bopp's Comparative Grammar, and not to his Articles on the Caucasian and Malay Languages.

Arian languages preserved some ancient relics of grammar, while in the declension of nouns the power of analogy tended to eliminate similar husky asperities. The pronouns being used continually, and having less of a material meaning than other nouns, had become fixed, formal, or inorganic, long before the rest of the grammar was consolidated. Hence, in their further dispersion, the Arian dialects were unable to preserve for the pronouns the same amount of vital growth which in Greece, for instance, formed the common Arian grammar into its Greek type, or which in Germany gave its Teutonic expression. Pronominal forms had arrived at a state of grammatical numbness *before* the separation of the Arian family. Hence, on the one hand, the striking similarity of pronouns in all Arian tongues, and, on the other, their liability to merely phonetic corruption. To this it is owing — to mere awkwardness in pronunciation, and not to any regular modification — that Latin *ego* becomes *yo* in Spanish, *eu* in Portuguese, *io* in Italian, *je* in French; and thus also Sk. *aham*, ego, became finally *I* in English. Yet even here we can discover rules, or at least broad analogies, according to which certain letters in one language are generally changed into the same letters in another. We find that Sanskrit s becomes Zend h, and Sanskrit h becomes Zend z; therefore the change of Sk. sahasra, thousand, into Zend hazanra is perfectly regular. According to the same analogy, Sk. aham, I, must in Zend be azem; and as in Armenian this Zend z is frequently represented by s, there is nothing irregular in the Armenian* es, I; nor shall we be obliged to go to Mongolian dialects in order to explain the Ossetic *az*, I, whatever Tataric or Tartaric scholars may say to the contrary.

The Turanian languages, though they preserved the vitality of their grammar to a much larger extent than any Arian dialect, yet were unable to avert altogether the same disorganizing influence from their pronouns. Some of their pronominal forms are therefore entirely Arian in principle, that is to say, anomalous and unintelligible; and what has generally been considered (wrongly, as has been shown) a distinguishing feature of Arian grammar, that "by some unknown process, forms are evolved from the body of a noun like branches of

* See Windischmann's classical Essay "On the Arian Basis of the Armenian."

a tree springing from the stem," would in this case seem to apply with real force to the Turanian languages. If we take Turanian grammar, even in its least developed state, we find, for instance, in Mangu, forms which, so far as the principle of their formation is concerned, would have to be pronounced Arian, according to Schlegel's definition of this term. We find *bi*, I; *mini*, mine; *be*, we; *si*, thou; *soue*, you; *i*, he; *tche*, they; that is to say, we find different bases for the same pronoun, and different forms of the same base produced, not by agglutination, but by what has been called a principle of "inward growth." What difference, as far as the principle of declension goes, is there between Greek ὁ changed in the plural to οἱ, and Mandshu *bi*, I, changed in the plural to *be*, we?* Many similar cases will be seen in an appendix containing a comparative list of pronouns. It is hopeless to attempt to discover in these inorganic forms the elements of agglutination. The same applies to the distinction of gender, which, though in most cases marked by additional syllables, whether nominal or pronominal, is sometimes expressed in such a manner that we can only explain it by ascribing an expressive power to the more or less obscure sound of vowels. Ukko, in Finnic, is an old man; akka, an old woman (in Canarese, akka, elder sister). In Mangu, chacha is mas (Mong. acha, Turkish agha, elder brother, uncle); cheche, femina. Again, ama in Mangu is father, eme, mother; amcha, father-in-law (Mongol. abagha), emche, mother-in-law (Mongol. emeke, grandmother). The same change of vowels expresses in other languages remoteness or proximity, as in Canarese, where "ivanu" is hic, "avanu" ille, and where, according

* Mr. Hodgson, for instance, analyses the Mandshu *tese*, they (or, as he writes, te-se-t) into *te*, he, and *se*, thou; and he denies that in Mandshu the plural can be formed by an additional *se*, because it is not always formed so, and because, as he says, a regular pluralizing particle would be uniformly applied and wear one shape. Now, this is not quite true either in Arian or Turanian grammar, and particularly not with regard to pronouns. Sivas in the plural makes sivâs; sarvas makes sarve; ego makes nos; Mandshu *bi* makes *be*. But in tese, *se* certainly seems the regular plural termination, only that after nouns it is restricted to words expressive of living beings. Thus, *dchoui*, child, makes *dchouse*, children; *wang*, king, *wangsa*, kings; *morin*, horse, *morisa*, horses. (See Gabelentz, § 24). The *se* in *tese* is most likely, therefore, the same *se* which we find in *ese*, hi, from *ere*, hic; and not the pronoun of the second person glued to that of the first, as Mr. Hodgson supposes. (J. A. S. B. 1853, p. 69. seq.)

to Weigle, there existed formerly a third intermediate pronoun, uvanu.

What we have here said proves that in the Turanian languages also, a greater allowance should be made for phonetic influences, whether accidental, as in phonetic corruption, or intentional, as in phonetic distinctions. Though our conviction may be that in an earlier state of language these formal changes also had a material origin, yet their analysis must baffle all ingenuity, and shows the truth of the saying, "Boni grammatici est nonnulla etiam nescire."*

§ 5. *On scarce Words.*

After considering words which are of daily use and frequent occurrence, and which, therefore, even in so porous a state of society as that of nomadic hordes, have a chance of remaining on the surface, we have still for a moment to bring before ourselves the effects which the same state of society would have on words of rare occurrence. Even at the present day, with all the speaking, preaching and reading we have to undergo, many men never use half the words which belong to their own language. Writers, again, are so little aware occasionally of the existence of certain words in their own language, that they coin new ones, though there is really no demand for them. If the new, however, become current, the old are melted down altogether, unless preserved in dictionaries, or revived by new editions of old books. But let us think for a moment of all the changes and chances of nomadic tribes, — of the small sphere of ideas and words in which their language moves permanently and continuously, — of the little support which expressions of a higher range, or names of a poetical tinge, though used once or twice by a poet or a king, would receive in Asiatic steppes, where men spend their life between hunting, fighting and eating, and women are kept only for breeding children and feeding cattle! It is rather surprising, that so many words should have remained for centuries in the sieve of languages like the Mongolians; and we have no right to expect that between tribes separated probably as early as any of

* See Schott, p. 45.

the Arian nations, words belonging to the higher ranges of thought should be found to agree entirely.

Seventh Section.

On Turanian Languages approaching to an Arian Type.

§ 1. *Arian Elements in Hungarian, Turkish, Finnish.*

If the unsettled state of grammar and dictionary in the Turanian languages is the result of that nomadic state of society in which they grew up and live, we should expect that this effect would cease whenever nomadic races enter into a state of political consolidation. This is indeed the case. Wherever there is a written literature and fixed standard of grammar kept up by the higher classes, the Turanian character approaches more and more to an Arian type. For the same reason, we expect a larger number of formal coincidences between Hungarian and Turkish, or between Hungarian and Finnish, than between the Samoieds of the Lake Altin and the Aimaks of Persia. In Turanian languages which have received a literary cultivation, as Finnish, Turkish, and Hungarian, forms occur which are corrupted into something very much like inflection: and here the separate stones of the grammatical mosaic can hardly now be taken to pieces. Irregular forms become frequent, and words partake more of a conventional and historical than of an etymological character. We see here how a Turanian may nearly become an Arian language; and, in looking at the earliest specimens of Arian grammar, such as Sanskrit, we may observe in an Arian language traces of an evanescent Turianism. In Sanskrit, although grammatical forms have been regulated and reduced by a sound economy, instances occur of superfluous distinctions, successfully comprehended by the Greek genius within more general categories. In Finnish, for instance, every imaginable relation of noun to noun and noun to verb can be expressed by what is called a case termination. We find a different suffix for the objective case when I beat a child, or when I strike it on a certain part of its body, — resembling thus the Greek genitive and accusative after verbs of a similar meaning. There

are no less than fifteen cases in Finnish, and yet no pure accusative!* All these cases are expressed by suffixes, some even by compound suffixes, to exhibit more complicated relations. The following table will give an idea of Hungarian declension: *kés*, as we saw before, was knife; kesem, my knife. This is declined:

1. Késem, my knife.	en, I.
2. Késemnek, of my knife.	
3. Késemnek, to my knife.	nek-em, to me.
4. Késemet, my knife.	en-g-em-et, me (or eng-em).
5. Késemert, on account of my knife.	ert-em, on my account.
6. Kesemmel, with my knife.	vel-em, with me.
7. Késemmé, toward my knife.	
8. Késemül, as my knife.	
9. Késemkent, like my knife.	
10. Késembe, into my knife.	
11. Késemben, inside my knife.	benn-em, in me.
12. Késemböl, from within my knife.	bil-em, in me.
13. Kesemre, upon my knife (coming).	r-am, upon me.
14. Késemen, on my knife (resting).	
15. Késemröl, down from my knife.	rol-am, from me.
16. Késemhez, toward my knife.	hozzam, toward me.
17. Késemnel, near my knife.	nal-am, near me.
18. Késemtöl, away from my knife.	töl-em, away from me.
19. Késemig, as far as my knife.	

It is true that many of these terminations are only postpositions, and might therefore be compared rather with the prepositions than with the case terminations of the Arian languages. Yet the case is somewhat different. The noun, together with these postpositions, forms, in Hungarian, a phonetic unity; it has but one accent, and the harmony of vowels connects the two still more closely. The real difference is this, that the Arian case terminations

* Mr. Hodgson makes a similar remark with regard to the verb: "A Tartar," he says, (J. A. S. B., 1853, p. 129.) "cannot endure that confusion of the precative, optative and imperative which our imperative mood exhibits. But he remedies the defect, not by the multiplication of grammatical forms, but by the use of distinct words, or distinct multiplications of the same word. Thus, *Davo*, solicits, *Davong*, commands, et sic de cæteris.

can no longer be used separately, while many of these postpositions occur as prepositions also. This may be seen in looking at the declension of the personal pronoun in Hungarian, which, therefore, I have put side by side with the nominal paradigm.

§ 2. *Turanian Elements in Sanskrit.*

As we see the tendency of the Arian languages to reduce the variety of their terminations, we may suppose that even the richest grammatical language, the Sanskrit, was, at a period previous to the Vaidik, and beyond our knowledge, richer still. In the dual, for instance, the genitive and ablative might each have had a distinctive form, as in the singular; and the same power of concentration, abstraction and method, which made the Greek feel satisfied with two cases in the dual, may have led the Hindú to divest himself of what he began to feel as an "embarras de richesse." After a time, however, this sound economy of the Arian languages seems to lead to an involuntary meagerness. By causes quite unintentional — corrupt pronunciation, for instance — cases become identical, and are no longer distinguishable even where their distinction is necessary for logical purposes. A principle reappears then at work in modern languages, which apparently may be called Turanian, — the principle of periphrastic, or, as it has been called, analytical formation. The phrase "de illo philosopho," the French "du philosophe," instead of "philosopho," is to a certain extent Turanian, though not entirely, because the distinguishing words are put before, not after the word they determine. Its modern contraction again, "du philosophe," is not purely Arian. *Du* does not stand to *le* in the same relation as τοῦ to ὁ. Du, instead of "de illo," is produced by a corruption of words which had before been articulated grammatically; — it is the remnant of a phrase; while τοῦ is the corruption of a compound, the component parts of which were pure radicals, not yet determined by grammatical terminations. The same applies to the periphrastic form "*j'aimer-ai*," I have to love, which even in its contraction *j'aimerai* can only be called quasi-Arian, because it rests on a different principle of formation from that which produced ama-bo. There is a distinction between these secondary Arian

and the primary Turanian formations, as there is also a vast difference between the reduced state of Arian grammar in the middle ages and the undeveloped state of Turanian grammar in the Tungusic and Mongolic branches.

§ 3. *Ascending Scale in the Turanian Languages.*

There is an ascending scale in the grammatical life of Turanian languages, running nearly parallel with the political and literary position of these nations. This has been pointed out by Schott and by Castrén. The *Tungusic* branch is the lowest; its grammar is not much richer than Chinese, and in the structure there is an absence of that architectonic order which in Chinese unites the Cyclopean stones of their language without further cement. This applies, however, principally to the Mangu; other Tungusic dialects spoken, not in China, but in the original seats of the Donkis, are said to be richer in form. The *Mongolic* dialects excel the Tungusic, but, particularly in their written language, the different members of speech are hardly as yet articulated. The spoken idioms of Tunguslans, as well as Mongolians, are evidently still struggling towards a more organic life. Professor Schott's remark, "that the Turanian verb which in Mangu and Mongolian seems, as it were, inanimate, and receives its life only in Turkish, by means of a connection of roots and pronouns," requires modification, since Castrén brought evidence of an incipient life in the grammar of the Buriäts and the dialect of Nyerchinsk. The mere juxtaposition of a pronoun and a root, as we find it in Mangu:

bi khoachambi, I feed,
si khoachambi, thou feedest,
ere niyalma khôachambi, this man feeds,

is hardly as yet grammatical. But Castrén assures us that instead of the invariable khoachambi through all the persons and numbers, he heard among Tungusic tribes distinctly the following terminations:

Singular.			Plural.		
1	2	3	1	2	3
u, f.	s.	n.	wun.	sun.	l.

These terminations are radical pronouns, and in the Tungusic dialect attach themselves to nouns as well as to verbs, taking in the former case the character of possessive, in the latter the character of predicative affixes. The Mongolic dialect, in which Castrén observed the same tendency, had advanced another step, for it made also formal distinction between possessive and predicative affixes. These are:

Predicatives.

Singular.			Plural.		
I.	II.	III.	I.	II.	III.
p, m.	s'. c'.	—	bida.	ta. t.	—

Possessives.

m.	s'. c'.	n (ńi)	manai	tani.	n (ńi.)

The differences between these two sets appear small, but are characteristic. The possessive affix of the first person singular, for instance, can never be *p*, because it is connected with the oblique base of the pronoun of the first person, *mini*, while the *p* of the predicative affix can only be explained by a reference to the nominative *bi*.

All this, however, is but a small beginning, particularly if we compare the profusion of grammatical stores which the *Turkic* languages display. These are next in order. With regard to their system of conjugation, the Turkic dialects can hardly be surpassed. Their verbs are like branches, breaking down beneath the heavy burden of fruit and blossom; and the excellence of the Finnic languages, richer in declension than the Turkic, consists, as far as the verb is concerned, rather in a diminution than increase of forms. Castrén says: "Progrediente in dissertatione apparuit affixa personalia in linguis Burjatica et Tungusica inchoata adhuc esse et quasi nascentia, in Turcicis vero jam formâ uti perfectiore magisque explanatâ, in Finnicis demum et Samojedicis linguis summum evolutionis gradum adepta esse."

The difference between the primary formations of Turanian and the secondary formations of Arian languages may be explained, if we consider that in *je vivrai*, i. e. ego (aham) vivere (*gîv-as-ê*, dat. neutr.) habeo (bhâv. ayâ. mi), we have a number of articulated forms,

resolved as it were again into simple matter, while in the Tungusic verb, grammatical form is produced for the first time by the mere connection of material elements.'

Eighth Section.

Evidence of the common Origin of the Turanian Languages summed up.

If after these considerations we look again at the problem of the affinity of the Turanian languages, and compare the evidence brought forward by Gyarmathi, Rask, Schott, and Castrén, with the amount which, from the nature of the case, we have a right to expect, most scholars, I think, will admit, that so far as it *can* be proved, proof of this affinity has been given. No doubt it may still be more fully confirmed, and many important questions remain for solution. But it may be regarded as no less proved than the affinity of the Indo-European languages was in the days of Sir W. Jones and Frederick Schlegel.

With regard to *roots* and *words*, in their primary and secondary meanings, Schott's "Essay on the Altaic Race," making every reasonable allowance for waste, is conclusive as to their natural affinity. Differences, such as exist in Turanian languages, between identical dialects, if spoken in different valleys, we must be prepared to find in cognate idioms, separated so far and so long — by centuries and by continents.

With regard to *pronominal roots*, Castrén has proved their identity, not only in character but in sound, with such accuracy that more on this point can scarcely be expected.

With regard to *grammatical forms*, we must consider that nearly the whole grammatical structure of the Turanian languages is built up from pronominal elements, which pervade not only the conjugation but the declension, nay, even the syntax of these dialects. As to the *other grammatical elements*, postpositions I mean principally, or similar particles, they also exhibit salient coincidences in some points, while their diversity on others does not mean more

than when we see in Italian an ablative formed by *da* (*de a*), and in French by *de;* or where, as in Wallachian, the genitive is formed by *a*, the accusative by *pre* (per), the ablative by *déla*, the dative taking no preposition at all: while further in the same Romanic idiom the article is put behind the substantive, reversing the order of its cognate dialects. Coincidences in these grammatical exponents will have to be mentioned when we point out their similarity with the case-terminations of the Dekhan dialects.

The *syntactical character* of the Turanian languages is also strongly marked, whether we look at their method of connecting roots and grammatical exponents into words, or words into sentences. In the first case all grammatical exponents must be added to the end of a base: bases tolerate no initial changes or additions. The grammatical terminations, though joined to roots, and this even euphonically, can with few exceptions be separated from the base. They are sometimes written separately, and admit intermediate elements, such as késnek and kes-em-nek. In the second case, as a general rule, the governed or determining always precedes the governing or determined word. Therefore *pre*positions governing a noun are impossible in Turanian languages. Conjunctions are scarce, the connection of sentences being marked by gerunds, or other verbal forms, with postpositions.

With regard to the *phonetic character*, the law of the "harmony of vowels" pervading these languages, and manifesting itself most strongly where artificial influences, such as writing, have least interfered, is a family feature not less strongly marked. It can only be compared with the triliteral character of the Semitic, or the peculiar accents and intonations of the so-called monosyllabic languages.*

* That these accents occur in languages more polysyllabic in their structure than either Greek or English, is shown by Hodgson and Robinson. The latter describes four accents in Gangetic and Lohitic dialects:—

"These intonations, depending as they do only on a modified action of those parts of the larynx which most immediately affect the voice, are, in general, exceedingly difficult for an European practically to distinguish. On a careful examination, however, it will be found that these tones do not in reality exceed *four*, and that they are the same as those described by Chinese philologists.

"The *first* of these may be said to be pronounced naturally, as a middle tone, even and moderate, neither raised nor deepened by any peculiar effort.

Like these numerous accents, the harmony of vowels is such as can hardly be presented accurately in writing; nay, even in speaking it requires a practised ear to distinguish, and a throat still more practised to imitate it. This law exists in the Tungusic, Mongolic, Tataric, and Finnic classes, though it does not influence all their dialects with equal force. Traces of a certain vocalic equilibrium occur, however, also in other classes of the Turanian family, as may be seen from the examples quoted by Mr. Hodgson from the Gyarung dialect. (J. A. S. B. 1853, p. 30.).

With regard to the *historical evidence*, I need not repeat the leading characteristics common to these nations, so powerfully stated in your Lecture. But I shall conclude with an extract from Abulghasi's History of the Tatars, which has been discussed by Deguignes, Klaproth, Rémusat, Gabelentz, and Schott, and as a tradition is certainly curious, because it shows that even in later times, when Mongolic and Tataric had by mistake become the names of two races, differing in languages, religion, and manners, a feeling prevailed among themselves as to their common descent, which could hardly owe its origin to any preconceived ethnological opinion entertained by Abulghasi, the Khan of Khiva, the descendant of Chinghiskhan, and contemporary of Sanang-Setsen (1664). He relates that all the nations of Central and Northern Asia descended from one ancestor called *Turk*, who was the son of *Japhet*, who was the son of *Noah*. Among his descendants two brothers are mentioned, *Mongol* and *Tatar*. It seems probable that Turk, though at Constantinople it has now become a name of abuse, was in truth one of the oldest collective names of the Turanian race. Chinese authors recognised it in the 5th century B.C., when speaking of the *Tukiuei*, as a branch of the *Hiung-nu*. The etymology they give is fanciful; for Turk, however it may have been explained afterwards, whether by the Turks themselves or by

"The *second* is a strong, rough, and vehement sound, produced by strongly exciting the action of the glottis in emitting it.

"The *third* tone is formed by raising the action of the glottis, as in forming the second tone, and then somewhat relaxing it, which, while it lengthens the sound, makes it end rather feebly.

"The *fourth* tone may be characterised as a short, thick, hasty sound, which seems to re-enter the throat, so as at length to be stopped in it." (See J. A. S. B., 1849, p. 192.)

Chinese writers, was originally a corruption of Tûra, Turvasa, Turushka, all names given by the Arians to equestrian Nomads and Indo-Scythian tribes north of the Himâlaya. One of the sons of Feridun, we may further notice, was called Tur; and when the father divided his kingdom between the children, he gave Turán to Tur, Irán to Irij, and Rum and Kháwer to Silim. Irij is killed by his brothers; but the kings of Persia descend alternately from the three brothers, — Menúchihr being an Iranian, Afrásiyáb a Turanian, Garshasp a Silimian. The names, therefore, Arian and Turanian, though now confined to scientific use, have yet a history of their own, which in its general bearing answers well with the technical objects for which they are at present employed.

Such is the case for the affinity of the Turanian languages. I have been here able to state the argument only in general: for matters of detail I must refer to Schott, Castrén, Gabelentz and Boehtlingk. To the objections raised by the last-named philologist I have paid particular attention; but although modifying some of the supposed characteristics of the Turanian languages, and recommending caution and more definite argumentation, they cannot be held to invalidate the conclusions arrived at in common by men like Rask, Gabelentz, Schott and Castrén.

If the principles here laid down are considered valid for establishing the relationship of languages, I am inclined to maintain that, similarly with these five classes, Finnic, Samoiedic, Tataric, Mongolic, and Tungusic, the Tamulic, Bhotîya, Taï, and Malay languages also belong to the same Turanian race.

SECOND CHAPTER.

ON THE TURANIAN CHARACTER OF THE TAMULIC LANGUAGES.

First Section.

The Arian Settlers and Aboriginal Races of India.

The name by which the whole class of the aboriginal languages of India is best known to us, was given it by the Brahmans. "D e k h a n" is a corruption of the Sanskrit "d a k s h i *n* a," which means "right" (dexter). To the Brahman who, in fixing his position, always imagined himself looking toward the rise of the sun, whatever lay to the south of his own country, was "dakshiṇâ" or "to the right." As the frontiers of the Brahmanic settlements were gradually extended, the meaning of Dakshiṇâ or Dakshiṇapatha became more definite, till at last the chain of the Vindhya-mountains was fixed upon as the natural frontier between what the Brahman called his holy-land and the Dekhan. It is now generally admitted that this holy-land of the Brahmans, even within its earliest and narrowest limits, between the Sarasvatî and Dṛishadvatî, was not the birthplace of the sons of Manu. The Arians were strangers in the land of the Indus and Ganges, but no one can now determine the exact spot whence they came and where they had been previously settled. Traditions, current among the Brahmans as to the northern regions, considered the seats of the blessed, may be construed into something like a recollection of their northern immigration — holy places along the rivers of Northern India, where even in later times Brahmans went to learn the purest Sanskrit, may mark the stations of their onward course — the principal capitals of their ancient kingdoms may prove the slow but steady progress toward the mouths of the principal rivers of India — but with the sources of those rivers the homes of the Arian strangers vanish from our sight, even after we have reached the highest points of view accessible on Indian ground.

The countries which the Brahmans took possession of, or rather over which they gained their priestly ascendancy, were inhabited by races of men, who are sometimes represented to us by the Brahmans as mere monkeys or bush-men, sometimes as uncouth giants, sometimes, as in the case of Bribu and Hanuman, as useful allies and faithful servants. In the social scheme of the Brahmans, however, these races could never rise beyond the position of a *Sûdra*. Exceptions like that of the Ribhus or Rathakaras, are very scarce and confined to the Vaidik age. No *Sûdra* again, as long as Manu's laws prevailed, could ever rise to the dignity of a twice-born man, and though even as a *Sûdra*, he had caste, yet the distance between him and the poorest Brahman was so wide and unsurmountable in the eyes of both parties, that we can only explain it by a difference of race, such as we find between the Spaniard and the Negro.

In ancient times the distinction between the twice-born Arians and the *Sûdra* was probably a distinction of c o l o u r also. The very name of caste in Sanskrit is varna, colour. Distinctions of colour, however, fade away and sometimes disappear altogether, even in despite of such barriers as the strict "l e x c o n n u b i i," interposed between the different ranks of Hindu society. Besides, these laws were not always observed, nor similarly respected in different parts of India. India was conquered and devastated several times—Greeks, Scythians, Arabs and Mongolians, mingled their blood with that of the conquered race, and as the priesthood and their nobility lost strength, it was easier even for the lowest ranks to claim a position, secured not by birth, but by wealth and power. Again, there is that long interval in the history of India, during which caste, at least in its religious sense, was altogether ignored. As long as Buddhism was the state religion of a great portion of India, that is to say from the third century before, to perhaps the sixth century after Christ, the different ranks of society could only be held apart by social prejudice and custom, and not by priestly authority. But in spite of all these changes and social commotions, the traveller in India to the present day, though he would look in vain for the distinctive features of a Brahman, a Kshattriya, or a Vaisya, feels the conviction irresistibly growing upon him, as he passes along the streets of cities, or the roads of villages, whether

north or south of the Vindhya, that everywhere he is brought in contact with at least two races of man, distinct in mind as well as in body. "No sojourner in India," says Dr. Stevenson, in the Journal of the Bombay Branch, January 1852, "can have paid any attention to the physiognomy of the higher and lower orders of natives without being struck with the remarkable difference that exists in the shape of the head, the build of the body, and the colour of the skin, between the higher and lower castes into which the Hindu population is divided. The high forehead, the stout build, and the light copper colour of the Brahmans and other castes allied to them, appear in strong contrast with the somewhat low and wide heads, slight make, and dark bronze of the low castes."

The name of "Dekhan languages," to signify the non-Arian dialects of India, is therefore inconvenient in one respect. According to its etymological and geographical meaning, it can only refer to nations and languages to the right of the Vindhya, while we evidently want a name sufficiently comprehensive to stand for all aboriginal inhabitants of India, wherever they are met with, from the Snows to Cape Comorin. Our highest living authority and best informant on the ethnology and phonology of the native races of India, Mr. B. H. Hodgson, of Darjiling, uses "Tamulian" as the general name for all non-Arian races. I have adopted this name, though it is not altogether free from objections, because it may be used in three different meanings. Originally it would mean one of the languages in the Dekhan, the Tamil; secondly, the Dekhan languages in general; and thirdly, all the aboriginal dialects of India. Mr. Hodgson himself uses it in the second and third senses. I should prefer, therefore, as a general name for all the native languages of India, Nishâda-languages. Nishâda is the oldest name given by the Brahmans to their non-Arian neighbours. It means Assiduus or Ansässig, and is therefore the most appropriate name for people who occupied the soil of India, before they were dispersed by the Arians. It is true the word Nishâda does not occur in the Rigveda, but at the time of Yâska, in the fourth century B. C., the "five races," frequently mentioned in the Veda, are always explained as the four castes and the Nishâdas. In the Brâhmaṇas also and in the epic poems, the word occurs as a general term together with Mle*kh*a.

"Tamulic" might, if this were used, be retained as the general name of the languages now principally spoken south of the Vindhya.*

Historical Traces of Nishâdas, or aboriginal Races in India.

On the ethnological state of India during the Vaidik periods, it is very difficult to form a correct opinion, because the scanty allusions to this subject which occur in the hymns are at variance with one another in different portions of the Rigveda. It is a fact, that the four castes existed previous to the collection of the Rigveda;—and

* The materials which I have used are almost entirely contained in the Journal of the Asiatic Society of Bengal. I subjoin a list of the articles to which I shall have most frequent occasion to refer:

Vol. 1847. p. 1235. B. H. Hodgson, On the Aborigines of the Sub-Himalayas; p. 1245. B. H. H., Comparative Vocabulary of the several Languages and Dialects of the Eastern Sub-Himalayas, from the Kali or Ghogra to the Dhansri (Subanshiri?).

Vol. 1848. 1. p. 73. Addenda and Corrigenda of the paper on Aborigines, etc.; p. 544. B. H. H. Ethnography and Geography of the Sub-Himalayas.

Vol. 1848. 2. p. 222. B. H. H. On the Tibetan Type of Mankind; p. 550. B. H. H. The Aborigines of Central India; p. 650. B. H. H. On the Chepang and Kusundu Tribes of Nepal.

Vol. 1849. 1. p. 238. B. H. H. A Brief Note on Indian Ethnology; p. 350. B. H. H. Aborigines of Southern India; p. 451. B. H. H. On the Aborigines of North Eastern India.

Vol. 1849. 2. p. 702. B. H. H. On the Origin of the Kocch, Bodo and Dhimal Tribes; p. 761. B. H. H. On the Physical Geography of the Himalayas; p. 967. B. H. H. On the Aborigines of the Eastern Frontier.

Vol. 1850. 1. p. 309. B. H. H. Aborigines of the North East Frontier; p. 461. B. H. H. Aborigines of the South.

While engaged in carrying this Essay through the press, I had the pleasure of making Mr. Hodgson's personal acquaintance in England, and I received at the same time his two important articles published in the Asiatic Journal of Bengal, 1853, Nos. I. and II.

Besides Mr. Hodgson's articles we find in the same Journal some very useful Essays by W. Robinson. "Notes on the Languages spoken by the various Tribes inhabiting the Valley of Asam and its Mountain Confines," vol. 1849. 1. p. 183. and 310.

Mr. Walter Elliot's Observations on the language of Goands, published as early as November 1847, in the same Journal, are well known, and have been honoured by a translation by Professor Lassen.

The Rev. J. Stevenson's articles are principally published in the Journal of the Bombay Branch of the Royal Asiatic Society.

therefore previous to any other written authority in India, which might be quoted to disprove their early existence. The hymn in the tenth Mandala, where the castes are mentioned with their technical names, though it may have a modern appearance, if compared with other hymns, is still the most ancient authority we can appeal to, and more ancient than any hymn in the other collections, or any Brâhmana or Sûtra. And further the four social ranks, priests, warriors, house-holders and servants, are clearly distinguishable in many of the hymns of the Rigveda, and in the Brâhmanas the Sûdra also is mentioned by name. Though he belongs to a caste, and therefore has rights as well as duties, he is distinctly called non-Arian, for Âryas, as the Satapatha-brâhmana says, are only Brahmans, Kshattriyas and Vaisyas. In addition to these four castes, who formed the body politic in India as early as the times of Vasishtha and Visvâmitra, we find in the hymns frequent allusions to the Dasyus. Dasyu means simply enemy, for instance, when Indra is praised because "he destroyed the Dasyus and protected the Arian colour." The "Dasyus" in the Veda may mean non-Arian races in many hymns; yet the mere fact of tribes being called enemies of certain kings or priests, can hardly be said to prove their barbarian origin. Vasishtha himself, the very type of the Arian Brahman, when in feud with Visvâmitra, is called not only an enemy, but a "Yâtudhâna," and other names which in common parlance are only bestowed on barbarian savages and evil spirits. We still have the very hymn in which Vasishtha deprecates such charges with powerful indignation. He says:

"If I had worshipped false gods, or if I had called upon the gods in vain — But why art thou angry with me, o Gâtavedas? May vain talkers fall into thy destruction."

"May I die at once, if I be a Yâtudhâna, or if I hurt the life of any man. But may he be cut off from his ten friends, who falsely called me a Yâtudhâna."

"He who called me a Yâtudhâna, or who said I am a bright devil — may Indra strike him down with his great weapon, may he fall the lowest of all beings."

In other passages, the word also which I have here translated by devil (rakshas), is clearly applied to barbarous nations. Originally

rakshas meant strong and powerful, but it soon took the sense of giant and barbarian, and in this sense it occurs in the Veda together with Yâtudhâna.

Another Vaidik epithet applied as it seems to wild tribes, infesting the seats of the Âryas, is "anagnitra," they who do not keep the fire. Thus we read, "Agni, drive away from us the enemies,—tribes who keep no sacred fires came to attack us. Come again to the earth, sacred god with all the immortals, come to our libation."

The same races are called "Kravyâd," or flesh-eaters. In a famous hymn of Vasishtha we read: "Indra and Soma, burn the Rakshas, destroy them, throw them down, ye two Bulls, the people that grow in darkness. Hew down the madmen, suffocate them, kill them, hurl them away and slay the voracious."

"Indra and Soma, up together against the cursing demon! May he burn and hiss like an oblation in the fire! Put your everlasting hatred upon the villain, who hates the Brahman, who eats flesh, and whose look is abominable.

"Indra and Soma, hurl the evil-doer into the pit, into unfathomed darkness. May your strength be full of wrath to hold out, that no one may come out again."

Kravyâd, flesh-eater, means people who eat raw meat, κρεοφάγοι, and they are also called âmâdas, ὠμοφάγοι, or raw-eaters, for the cooking of meat was a distinguishing feature of civilized nations, and frequently invested with a sacrificial character. Agni, who in the Veda is the type of the sacrifice, and with it of civilization and social virtues, takes an entirely different character in his capacity of "Kravyâd," or flesh-eater. He is represented under a form as hideous as the beings he is invoked to devour. He sharpens his two iron-tusks, puts the enemies into his mouth and swallows them. He heats the edges of his shafts, and sends them into the hearts of the Rakshas. He tears their skin, minces their members, and throws them before the wolves to be eaten by them or by the shrieking vultures. These Rakshas are themselves called "ahitas," mad, and "mûradevâs," worshippers of mad gods. Nay they are even taunted with eating human flesh, and are called "asutripas," as enjoying the life of other men. In the Rigveda, we read, "The Yâtudhânas who gloat on the bloody flesh of men or

horses, and steal the milk of the cow, o Agni, cut off their heads with thy fiery sword."

All these epithets seem to apply to hostile, and most likely aboriginal races, but they are too general to allow us the inference of any ethnological conclusions. The Vaidik Rishis certainly distinguish between Arian and non-Arian enemies. The gods are praised for destroying enemies, Arian as well as barbarian (dâsâ *ka* vritrâ hatam, âryâni *ka*), and we frequently find the expression, "Kill our Arian enemies, and the Dâsa enemies, yea, kill all our enemies." But there is no allusion to any distinct physical features such as we find in later writings. The only expression that might be interpreted in this way is that of "susipra," as applied to Arian gods. It means "with a beautiful nose." As people are fain to transfer the qualities which they are most proud of in themselves, to their gods, and as they do not become aware of their own good qualities except by way of contrast, we might conclude that the beautiful nose of Indra was suggested by the flat-noses of the aboriginal races. Tribes with flat or with even no noses at all, are mentioned by Alexander's companions in India, and in the hymns of the Rigveda Manu is said to have conquered Vi-*si*sipra (Pada-text, vi*si*-*si*pra), which may be translated by "nose-less." The Dâsa or barbarian is also called vri*sha*sipra in the Veda, which seems to mean goat or bull-nosed, and the "Anâsas" enemies whom Indra killed with his weapon (Rv. V, 29, 10), are probably meant for noseless (a-nâsas), not, as the commentator supposes, for faceless (an-âsas) people.

In the Brâhma*n*as, which represent a new period of Vaidik literature, the Nishâdas occur under more distinct features. In the Aitareya-brâhma*n*a, they are once mentioned in the same category with thieves and criminals, who attack men in forests, throw them into wells, and run away with their goods (Nishâdâ vâ, Se*l*agâ vâ, pâpakrito vâ).

In some of the later Brâhma*n*as also, the Pan*k*avin*s*a, for instance, the Nishâdas occur, and we there find, that they now live not only in forests but in villages. But there also, they are distinct from the castes as well as from the great mass of the people, the latter, though not under Brahmanic discipline, being yet considered as of Arian origin. This latter class, the Vrâtyas, are de-

scribed as differing from the Brahmanic laity in laws, customs, and pronunciation, but not in language. They could be readmitted into the Brahmanic community after performing certain rites and penances prescribed by law. Their name is Vrâtya, but never Nishâda In the Taittirîya-brâhmaṇa, we find after the four castes (Brâhmaṇa, Râganya, Vaisya and Sûdra), other names, such as Mâgadha, Sailûsha, Naishâda, Vrâtya, Kaivarta, Kirâta, Kândâla, etc., but again no description of their physical peculiarities.

This is very different in later works. In the Vishṇu-purâṇa (page 100, ed. Wilson), the type of the Nishâda is given,—"a being of the complexion of a charred stake, with flattened features, and of dwarfish stature." The inhabitants of the Vindhya mountains are called his descendants. According to the Matsya-purâṇa, they were as black as collyrium. According to the Bhâgavata-purâṇa, they had short arms and legs, were black as a crow, with projecting chin, broad and flat nose, red eyes, and tawny hair. The Padma-purâṇa adds a wide mouth, large ears, and a protuberant belly, and particularises their posterity as Kirâtas, Bhillas, Bahanakas, Bhramaras, and Pulindas.

From the most ancient times therefore to the period of the Purâṇas, we meet everywhere with indications, more or less distinct, of two races brought into contact in the Indian peninsula. A most vivid description of their physical peculiarities at the present time is given by Mr. Hodgson. In one of his articles published in the Journal of the Asiatic Society of Bengal (1849, p. 710), he writes: —

"A practised eye will distinguish at a glance between the Arian and Tamulian (i. e. Nishâda) style of features and form—a practised pen will readily make the distinction felt—but to perceive and to make others perceive, by pen or pencil, the physical traits that separate each group or people of Arian or of Tamulian (Nishâda) extraction from each other group, would be a task indeed! In the Arian form there is height, symmetry, lightness and flexibility: in the Arian face an oval contour with ample forehead and moderate jaws and mouth a round chin, perpendicular with the forehead, a regular set of distinct and fine features; a well-raised and unexpanded nose, with elliptic nares; a well-sized and freely opened eye, running directly across the face; no want of eye-brows, eye-lash, or beard; and lastly, a clear

brunet complexion ; often not darker than that of the most southern Europeans.

"In the Tamulian (Nishâda) form, on the contrary, there is less height, less symmetry, more dumpiness and flesh : in the Tamulian face, a somewhat lozenge contour caused by the large cheek bones ; less perpendicularity in the features to the front, occasioned not so much by defect of forehead or chin, as by excess of jaws and mouth ; a larger proportion of face to head, and less roundness in the latter ; a broader, flatter face, with features less symmetrical, but perhaps more expression, at least of individuality ; a shorter, wider nose, often clubbed at the end and furnished with round nostrils ; eyes less, and less fully opened, and less evenly crossing the face by their line of aperture ; ears larger ; lips thicker ; beard deficient ; colour brunet as in the last, but darker on the whole, and, as in it, various. Such is the general description of the Indian Arians and Turanians."

In other places Mr. Hodgson undertakes indeed to give some characteristic marks by which the principal sub-divisions of this Non-Arian, or Nishâda, stock might be distinguished in different parts of India. But though they would suffice to indicate at once the Nishâda in the Dekhan or in the jungles of Gondvân, in the slopes of the Vindhya or in the valleys of the Brahmaputra, in the Tarai or in the Ghâts of the Himâlaya, from his Arian neighbour, they are hardly sufficient to separate the Tamulian proper from the Kol, the Kol from the Garo, the Garo from the Lepcha, the Lepcha from the Bhotîya. Mr. Hodgson also, admits, in several places, that, on the whole, there is but one stamp impressed on all the Aborigines of India, that will admit of scientific definition. This stamp, he says, is the Mongolian "Look steadfastly at any man of an aboriginal race (an ubiquitarian Dhanger for instance), and say if a Mongol origin is not palpably inscribed on his face".

Second Section.

Ethnology v. *Phonology.*

Ethnology, therefore, as a physical science, would hardly bring us beyond a general conviction that India is inhabited by two different races of men. Nor should we, in our phonological studies, either expect or desire more than general hints from physical ethnology, The proper and rational connection between these two sciences is that of mutual advice and suggestion, but nothing more. Much of the confusion of terms and indistinctness of principles, both in ethnology and phonology, are due to the combined study of these heterogeneous sciences. Ethnological race and phonological race are not commensurate, except in ante-historical times, or perhaps at the very dawn of history. With the migrations of tribes, their wars, their colonies, their conquests and alliances, which, if we may judge from the effects, must have been much more violent in the ethnic, than ever in the political periods of history, it is impossible to imagine that race and language should continue to run parallel. The physiologist should pursue his own science unconcerned about language. Let him see how far the skulls, or the hair, or the colour, or the skin of different tribes admit of classification; but to the sound of their words his ear should be as deaf as the ornithologist's to the notes of caged birds. If his Caucasian class includes nations or individuals speaking Arian (Greek), Turanian (Turk), and Semitic (Hebrew) languages, it is not his fault. His system must not be altered in order to suit another system. There is a better solution both for his difficulties and for those of the phonologist than mutual compromise. The phonologist should collect his evidence, arrange his classes, divide and combine, as if no Blumenbach had ever looked at skulls, as if no Camper had measured facial angles, as if no Owen had examined the basis of a cranium. His evidence is the evidence of language, and nothing else; this he must follow, even though it be in the teeth of history, physical or political. Would he scruple to call the language of England Teutonic, and class it with the Low

German dialects, because the physiologist could tell him that the skull, the bodily habitat of such language, is of a Celtic type, or because the genealogist can prove that the arms of the family conversing in this idiom are of Norman origin? With the phonologist, English is Teutonic, and nothing but Teutonic, and that because what we may call its soul—the grammar—is Teutonic. Ethnological suggestions as to an early substratum of Celtic inhabitants in Britain, or historical information as to a Norman conquest, will always be thankfully received by the phonologist; but if every record were burnt, and every skull pulverised, the spoken language of the present day alone would enable the phonologist to say that English, as well as Dutch and Frisic, belongs to the Low German branch—this, together with the High German and Scandinavian, a branch of the Teutonic stock—this, together with the Celtic, Slavonic, Hellenic, Italic, Iranic and Indic, a member of the Arian family. The phonologist can detect by himself the ingredients of Celtic, a large admixture of Norman, a considerable infusion of Latin and even Greek in the English of the present day, although he would gladly admit that it frequently saves him time and trouble, if either historian or physiologist have indicated what residuum lies for analysis in his crucible. The same applies to our case: No physiological or historical evidence was necessary to convince the phonologist that the language of India was not one uniform language. Indeed, this difference was observed even before the difference of race had attracted attention, and ethnology was in this case led, and therefore misled, by phonology. The ethnological division of Arian and non-Arian inhabitants of India was at first chiefly based on linguistic evidence. Tribes that spoke Sanskrit dialects were set down as Arian; others speaking a non-Sanskritic tongue were classed as members of the Turanian race. This has led to much confusion and useless discussion. On one hand it was impossible to deny the fact, that in the North of India millions of people speak modern Sanskrit dialects, though their physical type is decidedly Tamulian; on the other no doubt could exist that many of the Brahmans of the Dekhan, now speaking Tamulian dialects, were of Arian extraction. The fact ought to have been stated plainly, for it is a fact to which there are analogies all over the world, and which scholars ought to have been familiar with by the knowledge that the

Normans, who spoke, every man, a Teutonic dialect, when they took possession of the North of France, spoke a Romance dialect, every knight and wight, when they conquered England. Attempts have instead been made to prove that Bengâli and Hindustâni were languages Tamulian in grammar; or, in an opposite direction, that tribes, like those who now inhabit the valley of Asam and speak Asamese, i. e. a Sanskritic dialect, had Caucasian blood in their veins, and were Caucasians modified and deteriorated by the influence of climate and of diet. But although the majority of people who speak Bengali may be of Tamulian extraction, does it follow that the grammar of their language is Tamulian? Or does it follow that the original inhabitants of Asam were Arians, because the language at present spoken in that country is Sanskritic in its grammar? In fact, after Asam was brahmanised in language and thought, it was again conquered by the Ahoms.* These overspread and conquered the country, and now constitute a large proportion of the population. Yet scarcely a single term in present use is traceable to the ancient Ahom, a language closely allied to the Shan and Siamese, and now understood only by a few Ahom priests who preserve their old religion.

There ought to be no compromise of any sort between ethnological and phonological science. It is only by stating the glaring contradictions between the two sciences that truth can be elicited. I feel no doubt that the only natural solution of the problem would have been found and accepted long ago, had it not been for this baneful spirit of accommodation and mutual concessions. Ever since Blumenbach tried to establish his five races of men (Caucasian, Mongolian, American, Ethiopian, and Malay), which Cuvier reduced to three (Caucasian, Ethiopian, and Mongolian), while Prichard raised them to seven (Iranian, Turanian, American, Hottentots, Negroes, Papuas, and Alfourous), it was felt that these physiological classifications could not be brought to harmonize with the evidence of language. Blumenbach's Caucasian race, for instance, was a congeries of at least three phonological races—the Greeks (Arian), Jews (Semitic), and Turks (Turanian). Yet this point was never urged with sufficient strength,

* Ahom is the same word as Asâm. It is said to be the Sanskrit Asama, unequalled, which pronounced according to the Bengali fashion is Asam, according to native pronunciation Ohom or Ahom. Cf. N. Brown's Grammatical Notices.

till at last Humboldt in his Kosmos (I. 353.) stated it as a plain fact, that, even from a physiological point of view, it is impossible to recognise in the groups of Blumenbach any true typical distinction, any general and consistent natural principle. From a physiological point of view, we may speak of varieties of man,—no longer of races. Physiologically the unity of the human species is a fact established as firmly as the unity of any other animal species. So much, then, but no more, the phonologist should learn from the physiologist. He should know that in the present state of physiological science it is impossible to admit more than one beginning of the human race. He should bear in mind that Man is a species, created once, and divided in none of its varieties by specific distinctions; in fact, that the common origin of the Negro and the Greek admits of as little doubt as that of the poodle and the greyhound. No argument, derived from the diversity of language, will shake the physiologist in this conviction; and the phonologist must keep it in view if he wishes to secure his science that honourable place which Humboldt assigned to it, as the connecting link between the physical and intellectual Kosmos.

The interval between the first beginnings of the natural history of man, and the times to which we can ascend through the evidence of language, may be so great as to make it impossible to gather up the threads of the one, and connect them with those of the other period. It may be—nay, if we consider the few facts here within reach of even inductive reasoning, most likely it will be—impossible to strengthen the arguments of physical science in favour of a common origin of mankind, by evidence derived from phonological researches; but it should not be attempted again to disprove the unity of the human race by arguments derived from the apparent diversity of human speech. On one side the phonologist need no longer feel hampered by the classifications of a Blumenbach and a Cuvier*, with regard to

* Cf. Synopsis of the Physiological Series in the Christ Church Museum, p. 2. Dr. Henry Acland defines the relation of physiology and linguistic ethnology (phonology) with exactness and fairness. The crania, he says, will furnish the student with examples of the modification of form of which the human skull is capable. In these forms, sufficient data will not be found for constructing natural groups of the nations; inasmuch as the researches of ethnologists tend to show, with more and more certainty, that these alliances are to be discovered by linguistic investigations alone. But the study of changes which occur in anatomical structure,

his classification of languages; on the other, he ought to bear in mind, that, if it is impossible to trace the convergence towards one common source of all the dialects of the human species, it will be necessary at least to explain the possibility of their divergence, and to account by analogy for the fact of their apparent diversity.

Third Section.

Subdivision of the Nishâda or aboriginal Languages of India.

Accepting for our starting point the general distinction between Âryas and Nishâdas, which, whether suggested by physical features, or proved by the evidence of grammar, may be considered as an undisputed fact, we have now to see if all Nishâdas are really of one stock; and if so, whether they can be subdivided into distinct groups.

"The physical aspect of the Nishâdas," says Mr. Hodgson, in a passage which just catches my eye, "is of that osculant and vague stamp which indicates rather than proves anything, or rather what it does prove is general, not particular." Their linguistic aspect, however, is more satisfactory, and no doubt the evidence to be derived from it will become still more convincing and more distinct if the collections and researches to which Mr. Hodgson has given so powerful a stimulus and so successful an example are continued with an equal zest and in the same spirit. It is, no doubt, a difficult and not always pleasant task to collect words and phrases from the mouths of people whom few would choose for the companions of their studies; but it is a task that promises to reward most amply the labour expended on it. Mr. Hodgson's plan of inviting cooperation all over India is good; but I am afraid he will not find that every "collector" is able to collect words or grammars. Mr. Hodgson's instructions also are practical; but it will require much philological tact, and painstaking scholarship to carry them out successfully. One point, perhaps, ought to be put forward still more prominently. Wherever

according to modes of origin, of life, of climate, and of society, will remain among the most interesting problems in the natural history of man, and of the animals, the co-tenants of our planet.

it is possible (and it should never be impossible), a grammatical outline of each dialect should be given, such as can be deduced from a number of phrases written down and compared with one another. Even the largest vocabulary will not make up for the absence of grammatical paradigms. But if time and leisure are wanting for this more tedious task, let the collection of words, at all events, reach the numbers which Mr. Hodgson originally fixed. The small vocabularies which have lately been published, for instance, of the Kole tribes, are not satisfactory, particularly as they involve a great problem. They hardly indicate, still less do they prove, any relationship between these dialects and any other. With the exception of Uraon and Rajmahal, which seem Tamulic in the narrower sense of the word, the other lists should certainly be re-made.

The chief objection to mere lists of words as proofs of the relationship of languages is felt where we have to deal with tribes whose previous history we have no means of knowing. It is impossible to say whether words collected among one tribe have been adopted from another; and even where we know that a language is mixed, we have no means of determining, without the assistance of grammatical forms, which of the two portions represents the original stock, and which the later additions. If a Brahman came to Europe, and without knowing much of the history and the languages of the continent, collected a number of words in Wales, in London and in Paris, he would no doubt, on his return home, discover a considerable quantity of words identically the same in his Welsh, English and French lists. Or, to take a more extreme case, if he collected words at Bayonne, some from Spaniards, others from Basks, he would here again find the majority of words, which he is likely to ask for, identically the same in both lists.* The differences in some words he would account for as he accounts in his own country for differences between Bengali and Hindustani, and, on a primâ facie evidence, he would feel himself justified in arranging Spanish and Bask as cognate tongues.

* Bask words taken from Latin or Spanish: gorputz, body; dempora, times; presuna, person; arima, soul; bekatua, sin; botua, vote; acceptatcea, to accept; affligitcea, to afflict; mendecoste, pentecost; eliza, church; aingeru, angel; arrosa, rose; artea, art; arrapostua, answer; azucrea, sugar; donceila, lady.

No doubt there are essential words which one nation very seldom adopts from another, such as pronouns, numerals, prepositions and conjunctions. But these again are generally short words, and very liable to corruption. Now, the chances of accidental coincidences, particularly with short words, are much greater than commonly supposed, and it will be useful to bear this in mind where we have to deal with scanty lists. The rainbow, in Georgian, is Iris. This may or may not have been taken from Greek. But the fingers, in Georgian, are called thithi, in Lapponian tiute, in Syrianian tyute, in Italian diti (*i. e.* digiti). Here we have a coincidence, the result of mere chance. Compare, besides, Georgian,

qirili, clamour, and Latin, querela.
didi, great, and Lithuanian, didis.
qeli, throat, and German, kehle.
khata, cat, and Latin, catus.
nawi, boat, and Latin, navis.
suli, soul, and German, seele.
uremi, carriage, and Greek, ἅρμα.
ghwino, wine, and Latin, vinum.
wizi, to know, and German, wissen.

It would be difficult to say, unless we regarded the Georgian as a member of the Arian family, which of these words are taken from Persian, Russian or Greek, and which are the result of accidental coincidence. But let us take languages between which no intercourse can be imagined, such as Mandshu and the classical languages, and the following list will give an idea how far phonetic coincidences may be produced by chance*:—

Mandshu.*	Greek and Latin.
akha, rain;	aqua.
aniya, year;	annus.
toma, grave;	tumulus.
ilengu, tongue;	lingua.
sengi, blood;	sanguis
cholo, idleness;	σχολή.
unun, weight;	onus.
koro, care;	cura.
amuran, smitten;	amoureux.
furu, rage;	furor.
ako, not;	οὐκ.
baru, before;	πρό.

* Cf. Von der Gabelentz, Grammaire Mandchoue.

Here we have confined ourselves to a collation of the classical languages; but if we allowed our eyes to wander over the whole surface of spoken languages, if we looked into American, African, Malay, Indo-Chinese and Siberian dictionaries, I believe that there is hardly a word in any language, to which, making the usual allowance for change of form and meaning, some other word might not be found almost identical. I take some instances from Klaproth's Asia Polyglotta:—

Sun,	shun,	Mandshu;	sonne,	German.
Moon,	sara,	Syriak;	sara,	Calmuck.
Star,	choshi,	Japan;	chos,	Ostiakian.
Water,	don,	Ossetian;	dan,	New Guinea.
Mountain,	oros,	Greek;	ura,	Tungusian.
Ear of corn,	agna,	Latin;	agna,	Lapponian.
Nose,	bini,	Persian;	bi,	Chinese.
Ear,	uhr (l),	Chinese;	ohr,	German.
Hand,	kara,	Sanskrit;	gar,	Mongolian.
Cow,	bo,	Erse;	ba,	Tibetan.
Dog,	kyôn,	Greek;	kiuan,	Chinese.
Blue,	kyanos,	Greek;	chiuan,	Chinese.
Egg,	eg,	Jenisseian;	egg,	English.
All,	pan,	Greek;	fan,	Chinese.

It is true that coincidences of this kind are not likely to deceive us long, because they could never run through tolerably full lists of words taken from languages distant in place and relationship. But where we have to unravel a cluster of languages, confusedly mixed, as, for instance, the Albanian, Wallachian and Bulgarian, on the confines of the Greek, Latin and Slavonic areas; or the Asamese, Chepang and Rajmahal on the confines of Sanskrit, Tibetan and Tamulian, it will be necessary to disregard at first all coincidences of words, and look entirely to their grammar.

In India, after the light that has been thrown on its ethnology by the combined labours of men such as Hodgson, N. Brown, Bronson, Robinson, Stevenson, Elliot, and others, we can clearly distinguish now between at least two classes of Nishâdas, the one receding before the stream of Arian civilization across the Vindhya into the Dekhan, the other pouring, at a time not easily determined, through the valleys of the Himâlaya into the north-eastern countries of India. The former class may be called *Tamulic*, in the narrower sense of the word; the latter *Bhotiya*, or *Sub-Himalayan*.

Fourth Section.

The Bhotîya Class.

To begin with the latter, which was recognised by Mr. Hodgson as a distinct class of dialects as early as 1828, there can be no doubt now that it is closely connected with the language of Tibet. Numerals, pronouns, and the terminations, or rather postpositions, which occur in these languages, are frequently identically the same as in Tibetan. As far as the evidence of language goes, no doubt can remain on this point. Nor is it difficult to account for it, whether ethnologically, historically, or geographically.

1. *Ethnological Evidence.*

Ethnologically, the Tibetan character is to be read on the face of all these tribes. "Their physiognomy exhibits generally and normally the Scythic or Mongolian type (Blumenbach) of human kind; but the type is much softened and modified, and even frequently passes into a near approach to the full Caucasian dignity and beauty of head and face; though among the Cis or Trans-Himalayans there is never seen any greater advance toward the Teutonic blond complexion than such as consists in occasional ruddy moustaches and grey eyes among the men, and a good deal of occasional bloom upon the cheeks of the children and women. A pure white skin is unknown, and the tint is not much less decided than in the high caste Hindus; but *all* are of this pale brown or Isabelline blue in Tibet and the Sub-Himalayas, whilst the many in the plains of India are much darker." (Dec. 1847.)

2. *Historical Evidence.*

Historically we can never expect much documentary evidence on the past history of nations who had no literature, no alphabet, no monuments. But an inference may be drawn, as Mr. Hodgson believes, that these Sub-Himalayan tribes were separated from their Tibetan

brethren at least before the introduction of Buddhism from India into Tibet. Indian letters, Indian literature, customs and ideas were carried into Tibet by Buddhist missionaries in the seventh century, and no traces of it are visible in the texture of the Sub-Himalayan dialects. Their own traditions, as Mr. Hodgson affirms, indicate a transit of the Himalaya from thirty-five to forty generations back (1000 to 1300 years); but their original separation may have taken place long before. Some of these tribes have preserved the same names which they have in the Mahâbhârata. The position there assigned to the Kirâtas and Kîkakas is the same which the Kirantis and Kîkakas now hold, and they are no doubt the same people with whom the heroes of the Mahâbhârata, Arguna and Bhîma, are represented as fighting. This point has been admirably treated by Professor Lassen in his ethnological articles in the Zeitschrift für die Kunde des Morgenlandes, and again in his Indian Antiquities. It has been proved that the name Kirâta was known to the author of the Periplus of the Erythrean, and to Ptolemy; and, what is important, this name was known to them east of the mouth of the Ganges and Brahmaputra. The Sabaræ of Ptolemy also are as far east as the Ganges, and they have been identified by Lassen with the modern Saur, the ancient Savaras, i. e. Mlekhas, names expressive of a pale rather than black colour. The physical description of these tribes, as given by the Greeks, agrees with the low Tibetan type, particularly if the Skiratæ of Megasthenes might be identified with the Kiratæ. They had flat noses, or, as Megasthenes likes to say, no noses at all. Certain it is that these low Turanian nomad races are mentioned on the frontiers of India so soon as any of the Arian nations come within historical sight.

In some cases, however, these Sub-Himalayan tribes have preserved a recollection of their former Trans-Himalayan homes — a fact which would seem to point to later immigrations than those which opened the first channel to the Trans-Himalayan population of Northern India. The Limbus for instance, are called Chong by the Lepchas, and the province of Chung in Tibet, south of Lhassa, is said by the Limbus to have been their original country. The Murmis speak of themselves as having at some remote period crossed the Snows, and they maintain that they preserved their language and religion (?) unchanged

since their arrival. A Dewan of the Sikkim Raja, who conversed with Mr. A. Campbell, told him that he crossed the original country of the Murmis on his way from Sikkim to Lhassa. (I. A. S. B. 1842, p. 4.)

3. *Geographical Evidence.*

Geographically we must look upon the Himalaya not as an unbroken chain or unsurmountable barrier to separate the high plains of Asia from the basins of the Indus and Ganges, but rather as mountain gates, opening to the bold adventurer a hundred different passes into the gardens of India. Here also we owe much to Hodgson's genius. His map of the natural divisions of the Himalaya is in truth a grammaire raisonnée of this irregular mountain-utterance. In order to give an idea of its organism in as short a space as possible, we might venture to compare the large mass of mountains between India and Tibet, in the North-East, to a hand with its five fingers expanded towards India. Every interval between two of these fingers marks the basin of one of the four of the principal rivers of Northern India, and each river draws its feeders east and west from the two ridges by which it is included. The four knuckles would represent the five highest peaks, which are the articulations of five mountain ridges projecting to the plains of India. If we look upon these ridges as the five fingers of a left hand, the knuckles, beginning with that of the little finger, would correspond to the following peaks: —

1. Chumalari 23929, 27° 52′, 89°,18′ (*K*imalhari).
2. Kangchang, 28176, 27° 42′, 88° 10′ (Kan*k*in*g*inga).
3. Gosain-than, 24700, 28° 20′ 86° (Gosvâmisthâna).
4. Dhoula-giri, 27600, 29° 10′ 83° (Dhavala-giri).
5. Nandadevi, 25589, 30° 22′ 79° 50′.

Between these five peaks, and included by their rib-like continuations, we obtain the following four river-basins: —

Between 5 and 4, the basin of the Saraÿû (Karnali).
Between 4 and 3, the basin of the Gandakî.
Between 3 and 2, the basin of the Kausikî.
Between 2 and 1, the basin of the Tistâ.

All these basins from West to East are successively drained by the Ganges, which takes first the Sarayû, then the Gandakî, Kauśikî and Tistâ, with their respective tributaries. The Ganges itself flows from a basin formed on its eastern side by the Nanda-devî, or the thumb, on the western by the Gangâvatâri and Yamunâvatari ridge (25669, 30° 55′, 78° 12′). It has absorbed its western feeder, the Yamunâ, before it reaches the Sarayû. The next basin, after the Gangetic, in the West, is that of the Śatadru, or Sutlej. It is the first river which is absorbed by the Indus. On the east, the next basin, independent of the Ganges, is formed by the Manasâ, the first river absorbed by the Brahmaputra. With the Śatadru, therefore, in the West, and the Manasâ in the East, two new systems begin. The sources of these two rivers, the Indus and Brahmaputra, are on the roof of the same hand, which, by its five, or, if we include the Ganges, its six knuckles, forms the sources of the Gangetic system. The courses of the Indus and Brahmaputra are determined by the northern declivity of the watershed between Tibet and India. They run, the Brahmaputra, alias Hladinî or Sanpu, towards the East, swallowing all the waters (Manasâ and Subhansri), on the left side of the Chumalari, or the little finger, and disgorging them near the tropic into the Bay of Bengal; the Indus, towards the West, absorbing the rivers of the Penjab and all the water on the right side of Yamunâvatari, and disgorging them near the tropic into the Bay of Cutch.

The whole length of the Himalaya, from where it is outflanked by the Indus and its tributaries to where it is taken in the rear by the Brahmaputra, is 1800 miles, the mean breadth being ninety miles. Though this proportion would be ill represented by that of the palm to the fingers, there is one feature in the conformation of these mountainous slopes which again it is easy to represent and to remember, by looking at a hand with its fingers slightly inclined. There are three transverse climatic divisions, which Mr. Hodgson established as early as 1847, and which he has since worked out more completely, assisted by Dr. Hooker. Each division takes about thirty miles. The first is called the Upper region from the crest of the snowy range, 16,000 (?) down to 10,000 feet above the sea. The second is the Central region, from 10,000 to 1000 feet above the

sea. The third is the Lower region, extending from 4000 feet to the level of the plains. These three regions, in their gradual decline, correspond in many respects with the arctic, the temperate and tropical zones. The lower region only, which would be the third joint of our fingers, requires and admits a new subdivision, into

I. The sandstone range (Dhuns or Maris);
II. The Bháver or Saul forests (Jhari); and
III. The Tarai swamps.

It was necessary to give this short outline, in order to explain the position of the Sub-Himalayan races in their relation to Tibet and India. The Upper region of the Himalayas forms the outskirts of Tibet. This country stretches on a level of about 10,000 feet, towards Bucharia and China, and forms a triangular plateau, having for its longest side the whole chain of the Himalayas.

The Upper or Cachar region of the Himalaya is therefore naturally occupied by the Bhotiyas, who extend along the whole line of the Ghats (mountain passes), and with the name, have retained the lingual and physical characteristics of their tramontane brethren. They may be called Bhotîyas, or by more special names, Rongbo, Siena, or Bhotia, Serpa, &c. Their language can be studied by means of the Tibetan proper, and by specimens of the Sarpa dialect.

The Central or temperate regions are distributed among the several Sub-Himalayan races in the following order. Between the Brahmaputra, or rather its tributary the Subhanshiri and the Chumalari ridge, that is to say, within the aqueous system of the Brahmaputra, we meet with the Mishmis, Bors, and Abors, Akas and Dophlas. The next or Tistean basin is the fatherland of the Dijondmaro (vel Dinjong-maro, man of Dinjong or Sikkim?), and of the Pluh or Lhopa, that is Lepcha and Bhutanese. The Koséan basin is the abode of the Kirantins and Limbus. Between the Koséan and Gandakéan basins, we have the high level space of Nepal, peopled by Newárs and Murmis. The next or Gandakéan basin is the seat of the Sunvars, the Gurungs and Magars. The distribution of these tribes, according to the different river basins, is given entirely on Mr. Hodgson's authority. But as most of them lead a very unsettled life, we must not expect to find their names always confined

to the "locale" here assigned to them. Another source of confusion is the variety of synonymous names given to the same tribe by different people. The Lepcha, for instance, whom Mr. Hodgson places in the Tistean basin, occupy, according to A. Campbell*, an extent of about 120 miles, bounded on the west by the Tambar branch of the Kuri, and in the east by the mountains of Bhutan. They are found in Nepal, Sikkim, and about fifty miles beyond the Tistá. They call themselves Lepcha, but are divided into two races, called Rong and Khamba. The latter state, that about 200 years ago they came together with the first ancestor of the Sikkim Raja, from Kham, a province of China, or rather Tibet, while the Rong have lost all recollection of their Trans-Himalayan origin. In a route from Cathmandu in Nepal to Tazedo, on the Chinese frontier, communicated by Mr. B. H. Hodgson, Amir, the interpreter, mentions Khambas and Kumis as Bhotiya inhabitants of Pochuzan, close to the frontier of Tibet and China. The Lepcha have an alphabet, whose character Csomo Korosi pronounced to be not-Tibetan. Their religion, however, is Buddhist.

The Limbus again, whose principal habitat, according to Mr. Hodgson, is the Koséan basin, are found, according to A. Campbell, not only between the Dud-kusi and the Kanki rivers, but, though in smaller numbers, eastwards to the Mechi river, which forms the boundary of Nepal and Sikkim. They exist even in Sikkim, and as far east as the Tistâ. Their name, Limbu, is said to be a corruption of "Ekthumba," and other tribes, the Kirantis, the Eakas (between Arun and Konki), and Rais are sometimes included in the generic term "Limbu." The Limbus are ranged under two great divisions, viz. Hung and Rai, each subdivided into many clans. Their original religion is neither Buddhist nor Brahmanic.

The Murmis again, of the Gandakean basin, are said to extend west as far as the Mechi, east through Sikkim as far as the Tistâ. They are also divided into several clans.

West of the Gandakean basin, in the basins of the Sarayu and the Ganges, the pure Tibetan type ceases, mongrel and mixed races occupy the central regions, the north-west parts excepted, where the Rongbo or Cis-Nivean Bhotias, the Garhwalis, and the in-

* Cf. A. Campbell, Journal A. S. B. 1840. p. 379.

habitants of Kanáver and Hungrang are said to be of Tibetan extraction, although their language is no longer Tibetan. The principal names of these mixed races northward to Gilgit are Khas or Khasias, Kohlis, Garhwalis, Kakkas, Bambas, Gakars, Khatirs, Awans, and Janjuhs. In the central regions we find also the Domes, the Helots of Kumaon.

In the third or Lower region, the following names occur; the Kocch, Bodo, Dhimal, Mecha, Kichak, Tharu, Denwar, Pallah, Boksar, Hayu (in the central *and* lower ranges between Arun and Konki), Chepang, Kusunda, Durre, Bramho, and other tribes, who alone can live and breathe the malarious effluvia of these swamps and forests without injury to their health. Some of them, as for instance the Tharus, extend westward as far as the Ganges.

4. *Phonological Evidence.*

It is a point of importance to determine whether these tribes all belong to the Tibetic stock. To judge from their outward appearance, particularly in the case of the Chepang, Kusunda, and Haiyus (outcasts in the second and the third regions), they seem to be of Tamulic extraction in the narrower sense of the word, that is to say, resembling in form and colour the aborigines of the plains. But the language of the Chepangs, when carefully collected and collated, proved to be of Tibetic origin. Hodgson found it possible to reconcile the contradiction, and account for the apparent physical differences between Bhotia and Chepang, by the deteriorating influences to which these outcast tribes had been for centuries submitted. As far, therefore, as physical evidence goes, we are free to look upon the darker colour and slender frame of all the tribes inhabiting the malarious region, as marks still reconcilable with their Tibetic origin; and lingual evidence is certainly in favour of this view. If we had mere lists of words, collected among the inhabitants of the lower region, there might still be a suspicion, that where their words happen to agree with the Tibetan, they were, in many cases, adopted. But the little we know about the grammar of the dialects of the third region, is sufficient to show that they belong to the Bhotîya, and not, as has been supposed, to the Tamulic class. If we

take the numerals of the Bodo and Dhimal, and compare them with Tibetan and Burmese numerals, and afterwards with those of the real Tamulians in the south, their coincidences with the latter are of a very general nature, while they agree with the former in such a manner as to leave no doubt about their common origin. The same applies to the pronoun, although here there is a family likeness even between the Tamulic and Tibetic tongues. This general relationship makes it difficult sometimes to distinguish at once the members of every different branch, all finally referable to one common stock. The Tibetic branch stands to the southern Tamulic in much the same relation as the Mongolic to the Ugric. The roots and words may often be the same, but they differ vastly in the degree of grammatical perfection attained by each. The Mongolic has no terminations as yet to express the different persons of the verb, neither have the Tibetan and Burmese. Exceptions like the Nâga dialect of Namsang, where we find the first signs of a verbal growth, are like the Mongolic dialects lately studied by Castrén, where a similar grammatical phenomenon was observed. The Tamulic branch, on the contrary, particularly in its leading dialects, has a system of verbal affixes as complete as the Ugric. Another distinguishing feature of the Tamulic, consists in the loss, or, at all events, in the absence of the intonations common to the Bhotîya and Chinese branch. Mr. Robinson describes four different accents or intonations prevalent in all the languages spoken by the tribes bordering on the valley of Asam, which includes Mr. Hodgson's Garos, Miris, Abor-Miris, and Kacháris, the last being taken as a general name, and comprehending the Borros (Bodos), Hojai-Kacharis, Kochis (Modai-Kochis, Phul-guriyas, and Hermias), the Mechis, Dhimal, and Rabhas. Mr. Hodgson, in his last articles, thinks that traces of musical intonation can be discovered even in more western dialects. None however exist in the Tamulic languages, and it may be stated as a fact, that of real Tamulic grammar, in the proper sense of the word, no trace has as yet been discovered north of the Ganges.

Trans-Himalayan Dialects.

Before we proceed to trace the southern ramifications of the Bhotîya class in India, it may be well to cast a glance on what may be called the Trans-Himalayan dialects of Tibet.

The Trans-Himalayan members of the Bhotîya class of languages do not properly lie within the limits of Indian phonology. They are mostly, however, dialects of that language which forms the type or norm of the whole Bhotîya class, the literary language of Tibet, and as such they have a certain importance for a study of the whole class. It should be borne in mind, that what we call a literary language, is, after all, only one out of many dialects, which politically may have been more successful than the rest, but which linguistically has no more right to be considered the sole representative of one body of living speech than any other of its dialect. Nay, in many cases, though literary dialects may be richer in words, they have been shown to be more reduced in grammar than their less cultivated sisters; and comparative philology has elicited more secrets from the lips of vulgar idioms than from classical writings of literary celebrities. Besides, with regard to Tibet, Mr. Hodgson tells us, that what we, after Csoma de Cörös, consider as the standard of Tibetan grammar, is positively repudiated by the people of Tibet (1853, p. 125.), so that any new collateral light on this subject will be useful and important.

Tibet, bounded in the north by the Kuenlun, in the south by the Himâlaya, is divided again by a third prominent chain, which Mr. Hodgson calls the "Nyenchhen-thangla." This chain, which is partially indicated by Ritter's Nian tsin tangla, is considerably extended by Hodgson, and forms, according to him, the barrier between the north and south, or between the nomadic and civilised portions of Tibet. Between this range and the northern borders of Tibet, we find three large nomad races, the Horpa in the west, the Sokpa in the east, and the Drokpa in the central portion. The Horpa (Ritter's Khor) reach into Little Bucharia and Songaria, where they call themselves Ighurs; the Sokpa extend as far as

the Kokonur and Tangut, and their country is called Sokyeul.* Besides the Drokpa (Brogpa), remain other nomadic tribes known by the names of Kazzak and Chakpa. The general name of these nomads of Tibet is Horsok, in contradistinction to the settled inhabitants of the southern provinces, who are known by the general name of Bodpa.

Some of these nomadic tribes coming into frequent contact or collision with the south, speak the pure Tibetan; others speak dialects. Mr. Hodgson gives a specimen of the Horpa in the west, which is a Bhotîya dialect; while the Sokpa in the east speak a Mongolic idiom. The language of the central Drokpa is not yet known.

Another tract of language, first explored by Mr. Hodgson, extends from the Sokpa on the north-eastern frontier of Tibet, along the confines of Tibet and China, toward the south, as far as Yunan. We have here the Amdoans, the Thochu, Gyarung, and Manyak. The first speak simply Tibetan; the other three speak dialects first collected by Mr. Hodgson. Another language, equally a Tibetan dialect, is spoken by the Takpa (Ritter's Gakpo, Gangpo, and Dakpo), not, however, on the eastern frontier of Tibet, but west of Kwombo, in the central province of Tibet. These tribes, with the exception of the last, are known in Chinese by the general name of Sifan, or western aliens. Finally Mr. Hodgson gives us one dialect spoken in the immediate neighbourhood of the Sifan, the Gyami; and this is no longer Tibetan, but Chinese.

The information which we possess regarding these languages is as yet extremely scanty, particularly with respect to their grammar. The vocabularies published by Mr. Hodgson are here less trustworthy than in other tribes. He says so himself, particularly with regard to the Sokpa and Gyami vocables. Still the linguistic evidence, incomplete as it is, is sufficient to warrant the classification of the Sokpa with the Mongolian dialects. The identity in the

* Of the two lists of words, respectively ascribed to the Sokpa and Horpa, the Sokpa words are Mongolian, the Horpa, Bhotîya. *Sok* and *Sok-bo* is the usual Tibetan name for Mongolian tribes; those who live in Northern Tibet and Tangut, nay all Mongolians between Tibet and the towns of Little Bucharia, call themselves *Sharaigol*, and are sometimes called *Chor* by the Tibetans, *Chor* being given as a synonyme of *Tata* (i. e. Mongol) in the Chinese-Tibetan dictionary of Peking.

numerals is surprising; but in the absence of a complete set of pronouns or pronominal affixes, it is impossible to enter into details. The Horpa language is more ambiguous. By its pronouns and numerals it is Bhotîya, and I have accordingly ranged it with the Trans-Himalayan Bhotîya dialects: forming their most western branch. Mr. Hodgson, however, refers the Horpa to the Turkish family, and he derives his argument "not only from the vocables but from the complex structure of Horpa verbs." The plural termination also, which is riggi in Horpa, sounds like Tataric grammar; for instance, the Horpa gna, I, gnariggi, we; as compared with the Tataric ben, I, and bisigi, we. Nay, the Thochu also, with its plural termination lar, the Manyak with its dur, and the Takpa with its ra, have at first sight a Tataric appearance. But we must wait until Mr. Hodgson will give us all his materials, before these Trans-Himalayan dialects can be classified with anything like safety, and I therefore give my own classification only as provisional and open to correction. Of the eastern languages of Tibet, that of the Amdoans is said to be purely Tibetan. The Thochu, Gyarung, and Manyak dialects are also connected with Tibetan; but again the scantiness of linguistic evidence is such as to make further identifications extremely problematic. The Gyarung, for instance, to judge from occasional instances given by Mr. Hodgson, seems far to surpass the literary Tibetan in grammatical forms. The Gyarung clearly possesses predicative pronominal prefixes, which in the Bhotîya class are confined to some of the Nâga dialects. They are used on the principle of composition represented in my table by βa, and, therefore, find analogies in the Caucasus, the Dekhan, and in Sanskrit. Mr. Hodgson points out himself the striking similarity between the Circassian and the Gyarung in the use of these pronominal prefixes, and he contrasts the

Circassian sara (I), wara (thou), ui (he),
s-ab (my father), w-ab (thy father), t-ab (his father),
with
Gyarung nga (I), nanre (thou), watu (he),
nga-pe (my father), na-pe (thy father), wa-pe (his father).

Mr. Hodgson maintains that the same principle prevails in the

Hayu, Kuswar, Kiranti, and Limbu languages of the Himálaya, and in the Uraon, Ho, Sontal, and Gondi tongues of Tamulian India! Unfortunately, he has not published his grammatical outlines of these idioms, which no doubt would throw more light on the intricate problem of the exact relationship of these tongues than pages and pages of mere vocables. As far as our information of these Indian dialects goes at present, I should feel inclined to doubt any connexion between the Gyarung and such languages as the Ho. There is a grammar, by Philipps, of the Sontal language, but it could not be procured for the present Essay. With regard to the Ho language, in which, according to Mr. Hodgson, similar possessive prefixes exist, I can only say, that in Tickell's account of this dialect I looked for them in vain. Tickell gives possessive pronouns, but no possessive pronominal prefixes.

But there are other features in the Gyarung grammar, to which I remember nothing parallel in Tibetan or any other Bhotîya dialects. I give the forms, as well as their explanation, on Mr. Hodgson's authority, who occasionally quotes them in his notes. A verbal root admits of a number of prefixes without any change of meaning. Thus, to go is not only ching, but also yaching, kaching, daching, taching, and naching. These are all used in a present sense. The past is formed by putting ta between the prefix and the root. Thus we get ya-ta-ching, ka-ta-ching, da-ta-ching, tataching, natachíng, all in the sense of "I went." Causal verbs are formed by putting sa between the prefix and the root. For instance, zo, to eat; ta-sa-zo, to feed. By using ma instead of the first prefix, we get a negative verb. Thus, ma-ta-ching, I went not; ma sa zo, I did not feed. Sometimes, we are told, two or three indifferent prefixes may be used, for instance, da-na-ra-gyuk, instead of simple gyuk, to run. The causal form of this would be again da-na-ra-sa-gyuk, to cause to run; and from this again the negative, ma-da-na-ra-sa-gyuk, not to cause to run. This a kind of grammatical mosaic of which one should hardly have expected a Bhotîya language to be capable. But, on the other hand, it cannot be said to be Turkic; because there the verbal root always maintains its place at the beginning, and though it allows a number of suffixes, in some cases even the same as those in Gyarung, at the end of

words, on the contrary, it excludes most rigorously any prefixes. The same applies to Burmese and its cognate tongues. They are full of modifying verbal suffixes; but the only verbal form which admits of a prefix is the negative, formed by m a. Thus, in Burmese, t h w a, to go, forms its causal, t h w a-z a, cause to go; its past, t h w a-b h u-t h e, I went. Its negative, however, is, m a-t h w a-b h u, he goes not.

A more complete grammatical analysis of the Sifan and Horsok tongues will be invaluable for determining the frontiers between Chinese, Mongolic, Tataric and Bhotîya dialects; and there is reason to hope that Mr. Hodgson will continue his researches in this direction. With the present evidence we must be satisfied to know that, besides the literary Tibetan, many dialects continue to be spoken, particularly in the north of Tibet, which in their vocables are related to Tibetan, and through it to the Sub-Himalayan idioms. The Sokpa dialect, however, seems to form an exception, for we can hardly be mistaken is treating it as a Mongolic dialect introduced into Tibet from Mongolia by nomadic tribes.

Fifth Section.

Further Extension of the Bhotîya Class, and its Subdivision into Sub-Himalayan (Gangetic) and Lohitic Dialects.

After this somewhat unsatisfactory survey of the northern members of the Bhotîya family, we return to India, to trace there the further spreading of the same speech south of the Himalaya. One imaginary barrier, which seemed to separate the languages of the second and third regions of the Sub-Himalayans, and which constituted the Kocch and Dhimal Tamulian, in contradistinction to the Tibetan immigrants, such as Limbu, Murmi, &c., has already been removed. These two groups of dialects once comprehended by one general title (Bhotîya), it will be easier to advance another step, and to include within the same class, many of the tribes of Asam

and Burmah which have been considered of Tamulic or of Taï origin. If the Kachari dialects are once admitted to be Bhotîyâ, and not Tamulic, the Burmese also cannot be kept separate, and with it all its cognate tongues, such as Singpho, Naga, Mikir, Abor, &c., have to follow. They are all non-Tamulic, and non-Taï. They show none of the features which are peculiar either to the cultivated or the uncultivated Tamulic dialects, either to Tamil or Gond; and where they seem to share in a common expression with the Tamulic or Taï idioms, it must be explained by that more distant relationship which once united all the members of the Turanian family, but which has left such few and solitary traces, that we frequently hesitate whether to treat them as the result of accident or of a primitive community.

It has been said that in Turanian philology neither numerals nor pronouns were of much weight to prove the relationship of languages, and that therefore the principles of comparative philology which are applicable to the Arian languages would have to be modified in their application to Turanian dialects. This is true only to a certain extent. It is true that it would be impossible to prove the common origin of the Tataric and Finnic, for instance, by means of their numerals and pronouns *alone*. We must admit that the fertility of the Turanian idioms continued after their separation, even with regard to these the most simple parts of speech. We have only to look at the Samoiedic and Mongolic numerals, and compare them with the Finnic and Tataric, in order to appreciate the truth of this remark. But though the numerals in all these languages are less useful for the purposes of generalisation, they are most advantageous for the purposes of subdivison. The Tchuvashian, for instance, formerly considered a branch of the Finnic stock, and arranged together with the Tcheremissian and Mordvinian, shows distinctly by its numerals that it belongs to the Tataric branch, to which it has accordingly been referred. In the same manner a comparative list of numerals is sufficient to show that the Kachâri dialects do not, as at first classified, belong to the Tamulic stock, but to the Bhotîya. This is confirmed by an examination of their grammar, even with so slight a sketch as that given by Robinson of the Kachâri dialect. Nothing, indeed, shows the

peculiar relation of the Tamulic and Bhotîya languages so distinctly as their numerals. They are instructive in two respects. We may learn from them in how high a degree the different classes of the Turanian family possess that independence, and that power of creating new forms and new words, which in some cases obliterates almost entirely all traces of their common origin. But we learn, at the same time, that in smaller spheres these dialects are as tenacious of their common words as any members of the Arian family. The grounds on which the general relationship of Turanian languages can be proved will always lie in the general principles of their grammar, so different from the grammar of both the Semitic and Arian nations. But the mass of languages which on such grounds would have to be referred to one family, is too unwieldy for any scientific purposes. They require to be divided again, to be classified and arranged so as to form an organic and well articulated whole. It is here that pronouns, numerals, grammatical peculiarities and irregularities assume their highest importance.

The Bhotîya languages, even after their separation from the Tamulic class, require a more accurate subdivision; but the materials are hardly sufficient as yet to enable us to pronounce definitely on this point. I shall first give a list of all the languages, which, together with the Burmese, must be included within the limits of the Bhotîya class. Afterwards I shall attempt to show that though they all form but one class, in the most general sense, they cannot be treated as such in the same sense in which, for instance, the Tamulic dialects are all but varieties of one common type.

1. *Lohitic Dialects.*

Geographically, the languages which we have here to consider, and which, with the exception of the Burmese, have been all collected from the mouth of uncivilised tribes, might be called Lohitic, in contradistinction to the former division of Bhotîya languages, which might very properly be designated by the name of Gangetic instead of Sub-Himalayan. Lohita is another name for Brahmaputra in Sanskrit; only it is used here in a narrower sense, as the name of the Yaru or Sanpu after its entrance into India. Under this geographical deno-

mination, however, the dialects now spoken in the third regions of the Himalayas also will be comprised. Although Kocch tribes are scattered at present along the Tistean, and Kosćan, and Gandakean basins, and included, therefore, within the limits of the Gangetic system, their proper aqueous habitat and source seem to be in the system of the Lohita, on both sides of the valley of Asam; and there the majority of these tribes yet resides. One stream of Bhotîya population would seem to have reached India by way of Utsang, following the trans-nivean feeders of the Ganges; the other by way of Kham, following the course of the Lohita and its Indian tributaries, which east of the Chumalhari are kept, by the watershed formed by that ridge from falling into the Ganges. These races extended toward the East into Burmah, and toward the West along the Tarai, Saul, and Mari regions of the Gangetic system. That here their dominion, in times within the reach of historical memory, extended considerably toward the South, is proved by the Kocch-kingdom, which was absorbed by the Company in 1773. Its limits were from 25° to 27° North lat., and from 88° to 93½° E. long., Kocch Behar being its metropolis. The Gangetic tribes also, as we saw before, must formerly have extended much more to the South, if we may identify with the present Kirantis the Kirrhadas, whom Ptolemy recognized on the Bay of Bengal. One of the ancient names of the Ganges is Kirâti.

The first language spoken in the valley of the Lohita is the Asamese, a sister-dialect of the Bengali, and therefore of Arian extraction. That it is a sister, and not a daughter, a collateral formation, and not a corruption of Bengali, has been proved by the Rev. N. Brown, in his excellent Grammatical Notices on the Asamese Language.

With the exception of the Asamese, all other dialects spoken east of Bengal constitute a separate class, of which the Burmese is the only language which has been fixed and regulated by literary cultivation. As a political language, it is now the language of Burmah Proper, and as a medium of political transactions used by the Mons of Pegu and by the Mugs of Aracan (annexed 1825), and wherever the supremacy of the Burmese conquerors was once acknowledged. Previous to the foundation of the Burmese empire the language of the

Myamma* was but one of the innumerable dialects spoken in the peninsula of the Irâvatî (pronounced Eráwadi), many of which have maintained themselves up to the present day, owing to the peculiar character of the country, which in its intricate mountain ranges affords safe refuge to races fond of independence in speech and customs. Even the Burmese, however, though a literary language, is liable to the most violent dialectical corruptions. The word for "say," pronounced rak in Aracan, is sounded like Yet by the Burmese; ri, the word for water in Araçan, sounds ye in Burmah. The Burmese consider an indistinct pronunciation fashionable, and always "chew betel and spices while speaking." The changes which Pali words adopted into Burmese have undergone may give an idea of the ravages to which their own words are liable: —

Sanskrit vyangana,	consonant.	Burmese,	b y i.
*k*âkra,	wheel; (Pali, *k*akka)	„	j e k and je or tse.
mârga,	road; (Pali, maga)	„	m a g.

It seems, on the whole, that the pronunciation in Aracan is more correct and distinct than in Burmah Proper. The Rukheng race, as Leyden says (As. Res., X., 222.), is admitted to be of the same radical stock as the Barmas or Birmans, and is understood to have greatly preceded that nation in civilization. The Barmas, indeed, derive their own origin from the Rukheng, whom they generally denominate Barmakyi, or the great Barmas, and they consider the Rukheng the most ancient and original dialect of the Burma language. It would therefore be of much greater utility to the philologist.

It is impossible to enumerate all the small tribes whose names have been collected by travellers and missionaries. Captain Gordon alone collected not less than twelve dialects in the neighbourhood of Ma-

* Myamma or Bomma, or Byamma, is the Burmese pronunciation of Marumma, the national name of the Rukheng race. The Rukheng vel Aracanese are considered as the ancestors of the Burmese. As Aracan is a corruption of Rukheng, Burma is a corruption of Marumma, which again is said to be a corruption of the Sanskrit Mahâvarma, the honorary title of Kshatriya races. Mug is a name given to the inhabitants of Rukheng by the Bengalis. Rukheng is originally the name of the country, and derived from the Pali word Rakkhapura (abode of demons); the classical name of the country is Dhanya wati.

nipura: the Manipuri, Songpu, Kapwi, Koreng, Maram, Champhung, Lahuppa, North-Tangkhul, Central-Tangkhul, South-Tangkhul, Khoibu and Maring dialects, some of them spoken by not more than thirty or forty families, yet so different from the rest as to be unintelligible to the nearest neighbours. I shall only endeavour to indicate the localities of those tribes whose languages have been comprehended in the lists at the end of this letter. The principal authorities I follow are again Mr. Hodgson and the Rev. N. Brown. With regard to grammatical questions, Mr. Robinson's articles are of the highest value. Short outlines of grammar, like those given by him, for various tribes inhabiting the valley of Asam and its mountain confines, will be indispensable if we wish to arrive at anything like definite results on the phonology of the country between India and China.

Tribes which have already been mentioned as inhabiting the malarious districts of the third Himalayan region, and which will have to be included within the Lohitic class of Bhotîya languages, are, starting from Govalpara in Asam, and proceeding as far as Aligang in Morang, the Kocch, Bodo, Dhimal, Rabha, Hajong, Kudi, Batar or Bor, Kebrat, Pallah, Gangai, Maráha, and Dhanuk. Of most of these tribes we know only the names, but the three first have been made familiar to all ethnologists through a very able treatise by Mr. Hodgson. The kingdom of the Kocch once extended in the West to the Konki, which joins the Ganges near Rajmahál. Their proper name is said to be Kavaka, prakritised into Kocch. They are called Hâsa by the Kacharis of Asam, Kamal by the Dhimals, and Kocch by the Mecch. In Asam they are divided into Kamthali and Madai or Shara, and Kolita or Kholta. The mass of the Kocch people have become Mohammedans, and the higher grades Hindûs; both style themselves Rajvansi. Few only adhere to the language, creed, and customs of their forefathers, so vividly described by Hodgson. The language of the unconverted Kocch has not yet been published.

The northern and eastern skirts of the Kocch country are inhabited by Bodo and Dhimal. The Dhimal are to be found as far west as the Konki; their numbers are small, and they are generally mixed with the Bodos. These are very numerous, and extend eastward

to the Dhansri (Subanshiri?), or even beyond, and occupy besides a large proportion of Central and Lower Asam. They are also called Kachâris, and Borros, which probably is the same word as Bodos. Their principal *locale* is said to be Chatgari, where they amount to about 30,000 souls. The whole number is estimated at between 150,000 and 200,000, which includes the Mechis of the West, and the Kacharis of the East and South. Sometimes Kachari is used in a more general sense, comprising the Hogai Kacharis of the plains, the Kochis (including Modai Kochis, Phulguriyas and Hermias), the Mechis, Dhimals and Rabhas. Hodgson has given lists of words of the Bodo and Dhimal; Robinson a grammar of the Kachari dialect, which is the same as Hodgson's Bodo. Robinson's Kachari words were supplied by Captain Gordon.

If we can trust the traditions of the Kacharis, their ancient name was not Kachari, but Rangtsa, and the country from which they came was situated north-east of Asam. They are said to have conquered the old kingdom of Kâmarûpa, and to have founded there the royal Dynasty of the "Ha-tsung-tsa." This Ha-tsung-tsa Dynasty was expelled again by the Ragas of Kooch Behar, and maintained itself in Hirumbha alone to 1130. Now, as in the twelfth century, at the commencement of the Ahom Dynasty in Upper Asam, Kamarûp was already in the hands of Kooch-Behar princes, the Kachari Dynasty may have been founded, as the Kachari chiefs assert, about a thousand years ago. Captain Fisher, who collected this information during his residence in Kachar, also asserts that the few remaining traces of the former religion of the Kacharis resemble the system of Confucius more than anything else. Brahmanism was introduced into Asam in the sixteenth century, but in Kachar Proper, or Hirumbha, its diffusion commenced not more than sixty years ago.

The Garos also are sometimes classed with the Kacharis, with whom no doubt they are closely allied physically and linguistically. They live, however, in a completely savage state: occupying a triangular extent of mountainous country between the left bank of the Lohita and the Khassia Hills. Garo words published by the Rev. N. Brown and Mr. Hodgson, the grammar by Robinson.

The Changlo, who are only known by Robinson's researches, occupy a portion of the northern frontier of the valley of the Lohita,

extending from the Binji Duwar to the confines of the Kuriapára Duwar. Their northern limit is unknown. Changlo in their language means black. Their grammar has been published by Robinson.

The Miris seem to have their chief seats in the low hills north of Banokotta and Lukimpur, whence they were pressed into the plains of Asam by their formidable neighbours, the Abors. Grammar published by Robinson; words collected by Robinson, and another list by the Rev. N. Brown of Sibsagor, published by Mr. Hodgson. Robinson's Miri numerals coincide more with Captain Smith's Abor Miri, than with those dictated by a Miri, at Sibsagor, to N. Brown.

The Miris are said to resemble the Karens (see page 379.) more than any people in the valley of the Brahmaputra. According to Mr. Cutter, their dress is precisely the Karen. They live in small villages in high raised houses like the Karens, but never stop more than a year in a place. They are scattered along the banks of the river from Bisnath up to Sadiya, and some distance up the Dihing. They speak the language of the Abors, a numerous and powerful race, inhabiting the highest ranges of mountains on the north bank of the Brahmaputra, between Jorhat and Sadiya.

The Abors or Bor-Abors occupy an extensive range of mountainous country along the southern exposure of the Himalaya chain, reaching, it is said, as far as Tibet and China. They are to be found on each side of the river Sampu. Of them we have only lists of words, published by Robinson, after materials furnished by the Rev. N. Brown; and by Mr. Hodgson as Abor Miri words, from a vocabulary by Captain E. F. Smith. The lists do not exactly coincide. The Rev. N. Brown gives specimens of a language called Aka, and closely connected with the Abor. The language of the Mishimi also, spoken east of the Abor country along the Sampu, has been examined by the same active missionary. It consists of three dialects, and is connected with Abor and Aka languages.

The territories of the Singphos extend from the Patkoi range to the Lohita, and from the frontier of Asam to the Langtang mountains in the east. Singpho is the language of extensive tribes occupying the northern portions of the Burmese empire. The grammar is published by Robinson, with the assistance of the Rev. M. Bronson. Lists of words are given by Mr. Hodgson after a vocabulary published

by the same. According to Mr. Robinson, one-fourth of the vocables in Singpho are allied to the Burmese, and an equal proportion to the dialect of Manipur. As a dialect of the Singpho, the Jili language is mentioned by the Rev. N. Brown. This tribe was driven out of their seats by the Singpho, and is now nearly extinct.

The Dophlas inhabit the southern face of the Himálaya from 92° 50′ to about 94° north latitude, which forms the northern boundary of the valley of Asam, from the Kuriapára Duwar to where the Subanshiri debouches into the plains. They call themselves Bangni, men. —Grammar and vocabulary published by Robinson. (J. A. S. B. 1851. p. 126.)

The Mikir occupy a tract of hilly country situated within the boundaries of the district of Nowgong (New-village) in central Asam. Numerous families are scattered in the south of Asam.—Grammar and vocabulary published by Robinson.

The Nâga tribes are most difficult to localize. They are divided into many branches and scattered over a large extent of country. Robinson circumscribes their habitat on the west by the Kopili river, the great southern bend of the Barak and the eastern frontier of Tipperah, in nearly east longitude 93°; on the north, by the valley of Asam; on the east and south-east, by the hills dividing Asam from the Bor-Khamti country in longitude 97°, and the valley of the Kyendrens; and on the south, by an imaginary line nearly corresponding with the 23rd degree of north latitude. Their name "Nâga" seems to have been given to them by the Brahmans. Their own name is "Kwaphi."

The Namsangiya-Nagas occupy the hills near the sources of the Buri Dihing river. Their grammar and vocables have been published by Robinson with the assistance of the Rev. M. Bronson. Of other Naga tribes we have vocabularies only. Two taken down by the Rev. N. Brown from two Nagas at Nowgong, and published by Mr. Hodgson as Nowgong and Tengsa Nága. Four more were published afterwards from the same sources. Of them the Mithan or Tablung Nagas reside on the hills east and north of Sibsagor. Their neighbours the Jabokas and Banferas speak nearly similar tongues. The Kharis descend upon the plains near Jorhat. The Angamis occupy the southern end of the Nâga country. The Nâga tribes are

scattered, but not migratory like the Kacharis and Kukis. The latter, called also Kunjye, are generally reckoned as Nâgas, but differ from the Nâgas in customs and appearance. The Kukis are not robbers only, but murderers by profession, and they are accused of cannibalism. Another name of the Kukis is Lunkta, *i. e* naked, and the name of the Nâgas is likewise explained as if derived from the Sanskrit "Nagna," naked.

The last contributions towards the phonology of these countries consist in vocabularies of languages spoken by the tribes in Arakan (vel Rakheng), collected by Captain Phayre *, and published by Mr. Hodgson. They contain no grammatical outlines. The geographical position of these tribes is here laid down according to Captain Phayre's indications. Ra-khoing-pyi, or the country of Aracan, lies between 20° and 21° 10′ N. lat. on the sea-coast; in the interior it extends to about 21° 40′.

The Khyeng live in the high range of mountains called Yuma, separating Aracan from the valley of the Irâvatí. They seem to be the same as Dr. Buchanan's Kiayn, only that according to him they term themselves Kolun, but according to Captain Phayre, Shyu. Karieng or Karayn also seem to be mere variants of Khyeng, r and y being frequently interchangeable in these dialects.

The Karens have lately attracted much attention by their embracing Christianity with high zeal and earnestness. The labours of the American Baptist missionaries seem to have met with a success hardly precedented in the annals of missionary enterprise. I take the following notices from an interesting memoir by a Karen missionary, "The Karens, or Memoir of Ko Thah-Byu, Tavoy, 1843."

The Karens have well-defined traditions of being comparatively recent emigrants in Tavoy. They say, "The elders said, we came down from the upper country. At first we settled on the Attaran; next we came to Ya; and finally to Tavoy." Though their dialects, as spoken at Tavoy and Maulmain, differ, the Karens on Belu Island at the mouth of the Salwen, are said to speak precisely the same dialect as that of Tavoy.

All Karen tribes seem to agree that they have not been long in

* All Arakanese are termed Mugs by the people in India, although the Mugs are only a very small race in Aracan, and not of pure Myam-ma descent.

Siam, nor are there any Karens in Siam except on the western side of the Meinam. There are but few in Aracan, and these confined to the southern province of Sandoway. The valleys of the Irrawaddy and Salwen bear the most distinct traces of their gradual progress. But beyond this, all is tradition, which points, however, to Tibet as the original home of the Karens.

I quote a very interesting and important testimony from a work by Mr. Kincaid. The result of all my inquiries, he says, is that Kakhyen is only another name for the Karens. All these mountain tribes, through the whole extent of the Shyan country, and further north into Tibet, are called Kakhyens, except in the Hukong valley, between Mogaung and Asam, where they are called Thing bau-Kakyen. The whole mountain country between Mogaung and Cathay is inhabited by the same people. Around the Martaban gulf, and thence inland as far as the Burman population has ever extended, the mountain tribes are called Karens. Between Rangun and Tung-u, and between Tung-u and Ava, they are very numerous: also between Tung-u and Monay, a Shyan city, about 250 miles east of Ava. There are some tribes scattered along between Burmah and the Shyan states, called Karen-ni, red Karens, and these extend as far as Zimmay. These are less civilized than those who live in the vicinity of Burman cities. Some have erroneously considered them as belonging to the Shyan family. Their language and everything else pertaining to them is Karen. In addition to this, the south-east part of Tibet is inhabited by Ka-Khyens; at least I have reason to believe so, as the Shyans, who live in the most northern part of Burmah, and adjoining Tibet, call the country, "the Kakhyen country." This is partly confirmed by Malte Brun, who, arguing from the accounts of Marco Polo, says, "Thus the country of Caride is the south-east point of Tibet, and, perhaps, the country of the nation of the Cariaines, which is spread over Ava. It will be seen, then, that these mountain tribes are scattered over a vast extent of country, and their population is estimated at about five millions."

"Tin," the Chinese appellation for the Divinity, exists in Karen poetry as the name of a false god, whom they regard as worshipped by a people with whom they were formerly in contact.

The similarity of the Karens and the Miris has been mentioned before, and in a vocabulary of seventy words published to illustrate the language of the Miris and similar tribes, about fifty, with slight modifications, were found in one or other of the Karen dialects. Their country extends from about the 19° to the 20° N. lat.

The Kami (vel Kimi) and Kumi are two divisions of a race inhabiting the hills along the river called Kuladan (limit of the Kulas or foreigners?) by the Aracanese, Ye-man by the Kamis, and Yan pan by the Kumis. The Aracanese distinguish the two tribes as Awa Kami and Aphya Kumi. They are tribes pressing onward in a south-western direction. They inhabited formerly the seats now held by the Khyeng, and drove the Mru out of the country which they themselves now occupy. The Kami language has been reduced to writing by the Rev. Mr. Stilson, of the American Baptist mission.

The Mru (vel Myu, vel Tung Mru) driven westward by the Kami, now inhabit the hills on the border between Aracan and Chittagong. According to the "Ragavansa," the history of the Aracanese kings, the Mru were in the country when the Myamma or Burmese entered, and one of their tribe was king of Aracan in the 17th century.

The Sak (vel Thock) inhabit the eastern branch of the Nauf river, and are called Chatn and Chanmas by the Bengalis.

There is another curious tribe, called Lung-khe, first mentioned by Lieutenant Phayre in his account of Arakan. They live on the upper course of the Kuladan, and generally west of that river. They are sometimes called Boung-ju. (Bunzus?) Both Lungkhes and Boungjus, it seems, were conquered, and are now governed by a third tribe, called Shindus by the Kumis, but by themselves Hling-ju. Their chief, Leng-Kung, who was examined, shortly before he was poisoned, by Lieutenant Phayre, gloried in his descent from that powerful tribe whose seat is N. E. of the Lung-khes, and whose country is fifteen days' journey in extent. He said that the Lung-khe and Shindu languages are nearly alike. Perhaps we have a specimen of this very language in Captain Tickell's article on the Heuma or Shendús (J. A. S. B. 1852, p. 207.). Their country is placed by Captain Tickell between lat. 22° and 23° N., and long. 93° and 94°. Some of the particulars mentioned by Leng-kung of

the Shindus, and by Lebbey of the Shendus, agree. Both bury their dead, while the Kumis burn them. The Shendu, according to Lebbey, make their houses of timber; the poorer classes only, of bamboo. The Shindus build their houses entirely of plank; nay, Leng-kung declared that there were no bamboos in the Shindu country, a fact doubted by Captain Phayre. The Shendus and Shindus thatch with grass. Both infest the neighbourhood of Chittagong. The names of their clans, however, differ, and there are other facts mentioned which make it doubtful whether the Shendus are really identical with the Shindus. The Shendus, for instance, are stated to buy salt; the Shindus manufacture it from brine-springs in their own country.

Other tribes are mentioned by Captain Phayre, such as the Daingnak (speaking a corrupt Bengali), Moung, and Khyau, but no vocabularies for them have as yet been published. The only addition to our knowledge of these dialects is a list of words of the Tung-lho collected by Dr. Morton, and published by Mr. Hodgson. The Tung-lho live in the Tenásserim provinces, and were recognised at once by Mr. Hodgson as dislocated aborigines driven to the wilds, or as broken and dispersed tribes like the Khyeng, Kami, Kumi, Mru and Sak of Aracan. Leyden also knew that the Tanengsari, or language of the Tanaserim districts, denominated Tinnaw by the Siamese, is only a rough dialect of the common Burmese.

2. *General Coincidences between the Sub-Himalayán (Gangetic) and Lohitic Divisions of the Bhotiya Branch.*

If it be asked why all these dialects from the Tistâ to the Irâvatî are referred to one class, I can here only point to their numerals for an answer, and to the comparative lists of words given in Mr. Hodgson's last articles. The grammatical genius also of these dialects, so far as it can be discovered from the scanty grammatical outlines of a few of them, is uniformly the same. The system of accents or intonations is common to all, and, with the exception of the Nâga dialects, none distinguishes the persons of the verb by either affixes or prefixes. In some of these idioms, the meaning of words,

whether nouns or verbs, is modified by additional syllables placed at the end of the substantive or the root, while the persons of the verb have no such distinction. The actual coincidences in the expressions for gender, number, cases, and verbal derivatives are numerous, but it would require too much space here to place them in their proper light. I shall only mention a few which are, of course, restricted to those dialects of which Robinson has given us grammatical outlines. But, judging from the general similarity of words between all, I believe that the same remarks will be found to apply to the other dialects belonging to this class of which as yet we possess vocabularies only.

Gender in all Lohitic and Sub-Himalayan (Gangetic) dialects, with the exception of foreign terms, is expressed by separate words, and is always restricted to the expression of natural sex. The usual terms for male and female are p a and m a (nya), though other expressions occur, and in some dialects p a and m a are restricted to a certain class of animals. For instance:—

Tibetan:	phag, pig;	phag-p o, male;	phag-m a, female.
Changlo:	kurta, horse;	kurta-p h o, „;	kurta-mo, „
Garo:	achak, dog;	achak-bip h a, „;	achak-bim a, „
Kachari:	;	bi-p h a, father;	bi-m a, mother.
Miri:	eki, dog;	ki-baka, male;	ki-n e k a, female.
Singpho:	gui, dog;	gui-l a s a, „ ;	gui-n u m s a. „
Naga:	hui, dog.;	hu-p o n g, „ ;	hu-n y o n g, „
Mikir:	kipi, a monkey;	kipi-a l o, „ ;	kipi-a p e, „
Burmese:	ngan, a goose;	ngan-h p a, „ ;	ngan-m a, „

I have given the list complete, in order to show the rule as well as the exceptions. It is also necessary to remark, that, with the exception of the Tibetán, where it is said that p o and m a may be prefixed as well as affixed, all other dialects invariably place these words expressive of gender at the end.

Another general feature of these dialects consists in forming the plural by an affix expressive of plurality. Now, as the idea of plurality admits of a much larger number of expressions than that of gender, it is natural that there should be a greater variety in the plural affixes of the same idioms. Two, the Singpho and Mikir, are said to exclude all expression of plurality; the Singpho, for instance, can only say a p a n a n g (many) a r l e n g (man), in order

to express the plural. It should be observed, however, that both Singpho and Mikir have plural affixes for their pronouns. Now, with regard to the syllables employed to express plurality, we find dag in Tibetan, thamcha in Changlo, and ki-ding in Miri. Tibetan and Changlo both employ nam; and Garo and Miri coincide in another plural affix, rang and arang. This rang seems to be the same as the Aracanese ro; and as the Burmese cannot pronounce the *r*, their do may come from the same source, though generally a Rukheng *r* corresponds to a Burmese *y*.

With regard to the case-terminations, or rather the post-positions fixed upon to express the relation of noun to noun, it is extremely difficult to institute comparisons. There are no fixed cases, such as genitive, dative, ablative, and the same post-position has adopted a variety of meanings in various dialects. As by in English may mean near to or by means of, and therefore correspond to a locative and to an instrumental, the same particle in these Lohitic dialects is sometimes made to serve opposite purposes. Still even here coincidences are not wanting if we examine carefully the paradigms given by Robinson. What is called, for instance, the instrumental, is expressed, in Tibetan by kyi,
Changlo by gyi,
Garo by chi,
Miri by koki,
Burmese by si.*

With respect to adjectives, it may be observed that in all these dialects, with the exception of the Burmese, they are either usually, or in some, invariably, placed after the word they serve to modify.

* I cannot help thinking that in some cases these post-positions, although they form part of the grammar, are words taken from Sanskrit or Asamese. In Asamese, para, a Sanskrit word, is used as an ablative post-position. In Mikir, the sign of the ablative is para; in Kachari, phraï; in Burmese, phraen. Now, that in Burmese Sanskrit post-positions are used becomes almost palpable in the case of kraun. Kraun is in Burmese the sign of the instrumental and the ablative. Both might be expressed by the Sanskrit karana, cause, means; and in Asamese, karane is actually used as an instrumental post-position. But the same kraun in Burmese is used as sign of the infinitive, and there again the Sanskrit karana, which originally means "doing," would be in its proper place. Coincidences like these can hardly be accidental.

Tibetan:	mi ngam,	man bad,	(optional).
Changlo:	aba changlo,	crow black,	(general).
Garo:	mande nama,	man good,	(always).
Kachari:	manse gaham,	man good,	(optional).
Miri:	amie aïda,	man good,	(always).
Singpho.	singpho kunkan,	man idle,	(always).
Naga:	asan koa,	milk good,	(always).
Mikir:	aso kangtuk,	boy fat,	(always).

3. *Distinctions between Sub-Himalayan (Gangetic) and Lohitic Dialects.*

But though it must be admitted that these Lohitic dialects form one class, it might be asked on what grounds they are to be separated from the Gangetic dialects on the north-west, and from the Taï dialects on the south-east. With regard to the latter, the answer will be given when we come to the Taï dialects. As to the distinction here proposed between the Gangetic and Lohitic dialects, I admit that it is more or less provisional, and that in any case I should always look on these two streams of language as sprung from the same source. Both have a right to the general title of Bhotîya, and their connection with the language now spoken in Tibet is transparent throughout. But these two streams must have reached India at different times, and having been exposed for centuries to various influences, may thus have grown into two separate dialects like the Ionian and Æolian dialects of Greece. I said before that words can only indicate general relationship, and that for the purposes of systematic arrangement we must rely on pronouns, numerals, and grammatical features. Unfortunately, we have no grammatical outlines of any Gangetic dialect, and we are obliged, therefore, to fall back on numerals and pronouns. Now, with regard to the pronouns, there is one well-marked feature to keep the Gangetic apart from the Lohitic class. The pronoun of the second person in all the seventeen Lohitic dialects of which specimens are available begins with *n*. In the Gangetic dialects the initial letter is an aspirated guttural, with the single exception of the Magar, and perhaps the Murmi. A feature of this kind, where we can hardly suppose a merely phonetic corruption as the cause of difference between the pronoun

of the Gangetic and Lohitic dialects, would be sufficient in Arian philology to shake our confidence as to the common origin of these two classes of speech. This need not be, where we have to deal with Turanian dialects. For in them even the pronouns, in other respects the most abstract and therefore most firmly settled parts of speech, are affected by that lingual superfetation which likes to express by two and more words the different aspects even of the most simple ideas. Some Turanian languages revel in a variety of pronominal forms shading them according to the light in which they look upon the person addressed, or wish to be looked at by him. Some of these pronouns are only ceremonial expressions; others, however, have become real pronominal bases. In the case before us, we find that the Chinese, which is a model of pronominal politeness, possesses two real bases for the pronoun of the second person, one consisting of the dental nasal, the other of the aspirated guttural: the former, ni, being used in the Kuanhoa; the latter, ghou, in the ancient Kuwen.

The numerals in the Lohitic and Gangetic dialects do not disguise their common origin. Their pronunciation no doubt varies considerably, but it never exceeds the bounds of analogy. In both classes, but more particularly in the Lohitic, the numerals have been encumbered with prefixes and affixes, which sometimes distort the features of the original numerals to an extent that renders their appearance entirely different. Still here also, analogy helps us to separate what is additional from the primitive root. These various changes, whether produced by corrupt pronunciation or by additional syllables known as "generic particles," make it impossible to discover any broad features by which a set of Gangetic could at once be distinguished from a set of Lohitic numerals. If the Tibetan and Burmese numerals could be used as types and representatives of the two classes, Gangetic and Lohitic, it would be easy to point out characteristic distinctions between the two. But if we look at the variations to which both the Tibetan and Burmese numerals are liable, in the endless ramifications of their living progeny, or rather of their kin, what seemed at first characteristic and distinguishing marks of the two, disappear again before the general likeness of the whole family. I have no doubt, however, that a more

intimate acquaintance with the grammar of the literary language of Tibet and Burmah will enable other scholars to discover the distinguishing features of these two languages in those ruder dialects also which are spoken between India and China, and which, though they may ultimately flow from the same fountain-head, have undergone considerable modification in their respective courses.

Sixth Section.

Taï Branch.

§ 1. *Survey of Taï Languages.*

There is another class of languages spoken on the confines of Eastern India and Western China, which might be passed over as foreign to our present inquiry, if some of the dialects belonging to it had not been mixed up with the Lohitic class. In so vast a subject as that of the Turanian family of speech, we must guard most carefully against confusion, which will necessarily arise unless we succeed in subdividing this large domain of philology. Now, with regard to the Taï languages, it can not be denied that by their roots they cling to the same soil from which the Bhotîya, or the Gangetic and Lohitic, dialects sprang. But as we distinguish in a tree between its roots, its trunk, its stems and branches, we must try to do the same for language. No scholar would compare Sanskrit and Italian, Celtic and Hindustani, although ultimately they can be traced back to the same origin. Still less could the Nâga dialects be classed with Khamti, as Mr. Robinson proposes. For if it be a peculiar feature in the Taï languages, that they are monosyllabic and destitute of inflections, surely the Nâga dialects are the very last to be brought under the same category. Mr. Hodgson, therefore, was right when, in his lists of words, he kept the Khamti distinct from the Nâga dialects, and his correspondent,

the Rev. N. Brown, declares emphatically that he does not even believe in any very close radical connection between Khamti and Burmese. "This affinity," he says, "seems always to have been taken for granted, as a matter of course, but without any just ground. It is true there are a considerable number of Burman words in the Khamti, but they beaf the marks of recent introduction, and are not to be found in the old Ahom, the parent Shyan, nor in the Siamese, with which the Ahom was nearly, if not exactly, identical."

The languages which belong to the Taï class, and interest us with reference to their Lohitic neighbours, are the Siamese, Ahom (Shyan), Laos, Khamti, and Kassia. The Siamese language was formerly, and is still called Sayama phasa, or the Sayam language, sayam being, according to Bishop Pallegoix, the same as the Sanskrit *syâma*, brownish, which is said to be the original name of Siam. Shyan seems to be a corruption of this name. But the same language is more frequently called phasá thai, which means "language of Free-men," a name which the Siamese assumed after shaking off the yoke of Kamboja. Hence the whole class of these dialects has received the general title of Taï or Taïc languages. This title may seem not very appropriate, considering its original meaning. But as it has already become a usual term, it may be retained for the present. Most of these languages have alphabets of their own. There is a Khamti and Shyan alphabet, both derived from the Burmese; and a Laos alphabet, derived from the same source, but better adapted to the wants of the language; and the Siamese alphabet, also related, but more distantly, to the Burmese. A comparative table of these alphabets, promised by Mr. Robinson, has not yet been published.

The Rev. N. Brown has first drawn attention to the curious contrast between the Nâga and the Taï dialects. While the former exhibit an extraordinary exemplification of the manner in which an unwritten language may be broken up even upon a small extent of territory, the great Taï family offers a not less striking instance of the preservation of language, in almost its original integrity and purity, through many centuries, and in spite of a vast territorial diffusion. For from Bankok to Sadiya, along the Menam, Salwen, Irawadi, and Kyendwen rivers, up to the sources of the Irawadi,

through 14 *degrees of latitude*, there is but one language, notwithstanding the diversity of governments under which the speakers live.

The discrepancies between the Khamti and Siamese, spoken at the two extremities of this linguistic area, seem to be very trifling. Nine-tenths of the fundamental words, according to the Rev. N. Brown's calculations, are the same in these dialects, with the exception of slight variations in pronunciation.

The localities of the Taï languages mentioned above are known with tolerable accuracy. While the Lohitic languages seem to spread in a southern direction, the Siamese dialects have at present rather a tendency toward the north. The Siamese conquered Asam. The proper name of these conquerors was Shyan* (or Shan), but the conquered nations gave them the name of Ahom (the Sanskrit asama), which in Asamese means "unequalled." What is called the Ahom language is now nearly extinct. Though the present Ahoms of Asam, the descendants of the conquerors, still form one of the largest portions of its population, they have relinquished their language and their religion for that of the Hindus. The Ahom is now understood only by a few Ahom priests who still preserve their old religion.†

The Khamti is the most northern branch of the Taï family. Its position among Lohitic dialects becomes intelligible if we suppose that the Khamtis were driven northward by the same impulse which brought the Siamese as conquerors into Asam. Though separated from the Ahom, it is only through it that the Khamti can be historically linked to the Siamese, to which no doubt it belongs linguistically.

The same applies to the Kassia (or Khyi) language, which is spoken in the mountain territory surrounded in the north by the valley of Asam; in the west by the Garo hills; in the south by the district of Sylhet; and in the east by Kachar. Of the Kassia we have a grammatical sketch by Mr. Robinson. Captain Fisher, in his Memoir of Sylhet, says that their language exhibits no affinity with any of the languages of the neighbourhood, but that a people resembling the Khyi in some particulars formerly occupied a position on the south bank of the Brahmaputra, at Measpara, where they were

* N. Brown's Grammatical Notices, xxvi. † Ibid., p. iv.

called Mek, and that these came originally from the frontiers of Butan and Nepal.

As the conquerors of Asam were Siamese, we may understand how the ancient Ahom came to be so closely allied to the Shyan or Siamese. According to the Rev. N. Brown, the Ahom was nearly, if not exactly, identical with the Siamese. Grammarians distinguish between a vulgar, a high, and a sacred dialect of the Siamese. The vulgar dialect admits but few foreign words, from Chinese, Malay, Lao, and Kamboja sources. The high and sacred dialects are full of Sanskrit and Pali words, changed according to the genius of the Siamese tongue. It is extraordinary how, after this exposition, Bishop Pallegoix, the author of a Thai grammar, could maintain that the Thai and Lao languages derived their origin from two Brahmans who founded the town of Sangkhalok in the year 150 Phra Khodom, i. e. 393 B. C. The language of Siam is surrounded by five or six different classes of language. In the west it is included by the Burmese and cognate Lohitic dialects. At the northern point its frontier line touches the Arian territory, the Asamese. Hence, turning round toward the east, it comes in contact with Gangetic dialects, while the whole eastern frontier is formed by the Chinese and Cochinchinese languages. The most southern limit of the Siamese touches the realm of the Malayan speech, while the language of Pegu, the Mon*, the south-eastern neighbour of the Siamese, is still of unknown origin.

The name of Laos on our maps, in the interior of the country between the Menam and Mekhong rivers, indicates the locality of the Lao language. The language is only known by collections of words, which are very like the Siamese. It is a language rich in literature, and a country full of relics of a former civilisation and Buddhist hierarchy.

* A list of words given by Dr. Morton, of the Mon or Talien, shows coincidences with Kamboja words from the Mekhong river. The Burmese and Siamese both affirm that the Mon language has no affinity with their own speech.

§ 2. *Relation of the Taï to the Lohitic Languages, and their Connection with the Bhotîya Class and Chinese.*

We have now to consider some of the grammatical features which are peculiar to these languages, and by which they are held together as a class, and kept distinct from their Lohitic neighbours. The materials available for this purpose are small. There are lists of words of all of these dialects; but it is only of the Khamti, the Kassia, and Siamese, that we possess grammatical outlines, and those again but very slight.

If there are languages which can properly be characterised as monosyllabic, this title may be applied to the Taï languages. Certainly the Bhotîya dialects, whether Gangetic or Lohitic, cannot lay claim to this title, though it is usually bestowed on them. If from a Burmese root or a base, "kung," which means good, or to be good, we may derive a-kung, good, kung-khyeng, goodness, and kung-than, good — we cannot call a language like this monosyllabic. If monosyllabic means only a language which by a more or less difficult analysis can be reduced to monosyllabic elements, then Sanskrit is monosyllabic also. But if it means a language in which the speaker feels every syllable as a distinct sound, expressive of a distinct meaning, then I doubt whether even the Chinese can be called entirely monosyllabic. No languages, however, come nearer, or, I should say, no dialects are less removed, from the Chinese status of grammar than the Taï languages.

The system of musical accents or intonations, though it exists in the Gangetic and Lohitic* dialects also, is said to be much more

* Mr. Hodgson (1853. p. 128) says, the principle of the tonic or accentual variant has most erroneously been supposed to be exclusively Chinese and Indo-Chinese, whereas it prevails far and wide, only more or less developed; most, where the servile particles and so-called silent letters are least in use; least, where they are most in use; so that the differential and equivalent function of all three peculiarities—that is, of empty words, of silent letters, and of tones—is placed in a clear light.—The language of Nepal Proper is remarkable for its numerous tones and its scanty serviles, whether literal or syllabic. According to the Rev. N. Brown, Chinese distinguishes eight, the Taï languages five or six, the Karen five or six, the Burmese three accents. In the modern Chinese, as, for instance, in the dialect of Shanghai, eight tone-accents are observed.

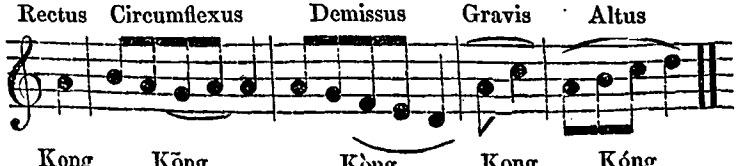
marked in the Taï class. This would be so of necessity, because these dialects abound in sounds organically the same, but expressing ideas totally different. In Khamti, for instance,

ma with the rising tone signifies *a dog*,
ma with the falling tone signifies *to come*,
ma with an abrupt termination signifies *a horse*.

In Siamese, khai, as it is pronounced with different intonations, may mean, who?, egg, fever, to open, rough, camp, to sell. The number of accents in Siamese is fixed at five, tonus rectus,* circumflexus, demissus, gravis, and altus.

This system of accents, however, by no means excludes the possibility of composition. We are apt to imagine that as long as every syllable has an accent of its own it remains independent, and does not enter into composition. This is true with regard to our accent, which is of a logical or etymological nature; but it does not apply to accents like those in Chinese and Siamese. The Chinese themselves distinguish between full words (shi tsé) and empty words (hiu tse). These empty words, although they have an accent, have no independent meaning of their own, but determine and modify the meaning of other words. The same applies to Chinese compounds. Here also, two words form but one logical idea. Cé'gin is not tongue + man, but man of the tongue, i. e. an interpreter. 'Gi tsé is not sun + son, but the son of the sun, i. e. day. Discarding compound and polysyllabic words, which the Siamese have borrowed from the vulgar Sanskrit, the Pali, or the sacred language of the Buddhists, we find even Siamese words joined together to express one idea. For instance, nam chai, water (of the) heart, *i. e.* will; kan suk, opus belli, i. e. bellatio. Abstract words

* The accents are thus represented by Pallegoix in musical notation:



Leyden compares the modulation of these accents with the chanting of the Samaveda in India.

are formed by prefixes expressive of "heart," "matter," etc.; and in a similar manner substitutes are found to express approximately number, gender, and case. However, Siamese, no doubt, may be called monosyllabic in the only sense in which any human language can be so, in so far as it shows very few traces of compounds in which one part has entirely lost its original form and meaning. In this sense the Taï languages are monosyllabic, and the Lohitic are not.

There are other fundamental principles by which the grammatical system of the Taï differs from the Lohitic dialects. We saw that in the Lohitic dialects all words expressive of case, number, and gender were put at the end of words. It is just the contrary in the Taï languages, so far as known to us. Gender only may form an exception, because it may be expressed by an adjective, and the adjective in the Taï, as well as in the Lohitic dialects, follows the substantive. Thus ma in Khamti is horse; ma-thuk, a stallion, ma-me, a mare; miau, a cat; miau-thuk, and miau-me, a male and female cat. In Kassia, however, gender is expressed by prepositive particles; for instance, u-tanga, husband, ka-tanga, wife; u-kapa, father, ka-kami, mother.—Number, where it is expressed at all, is expressed by prepositive words. In Kassia the plural is expressed by the preposition ki; for instance, sing. u-mon; plural. kimon. In Siamese the plural is expressed by a prefix, meaning many. Bishop Pallegoix, in his Thai grammar, gives a complete paradigm of a declension in Siamese. In it all cases, with the exception of the vocative, are expressed by prepositions. It is the same in Robinson's Kassia and Khamti grammars, and we find there that all other local, or temporal, or causal relations, which in the Lohitic dialects are invariably expressed by postpositions, are here rendered by a large array of prepositions.

A grammatical feature like this marks the family-likeness of the Taï languages better than even the striking similarity of their numerals; and it establishes the more distant degree of relationship between the Taï and and Lohitic dialects, indicated, though less distinctly, by the variations to be observed with regard to the numerals in each class. Numerals as well, if not more even than other words, are exposed to phonetic accident and fluctuation, which,

in the absence of historical documents in these Eastern dialects, will hardly ever be reduced to the same rules as the phonetic changes of the Arian languages. We have only to compare lists of words collected among identically the same tribes by different persons, in order to convince ourselves what vague and unmanageable materials we have to deal with. In Siamese, r and l are said to be pronounced like n in the close of a syllable; ma and ba, tya and chga, are often of difficult distinction when pronounced, as are ya and ja, kyé and chyé. We saw before how mangled an appearance Sanskrit words have if adopted in Burmese. The same applies to Sanskrit words in Siamese. We should hardly recognise in the adventures of Pram and his brother Pra-lak, and in their wars with Totsa-kan, who carried off Nang Seda, the stories of Râma, Lakshmana, Dasakaṇṭha and Sîtâ. Nor would the Buddhists of India easily discover their Buddha Siddârtha, and Suddhodana in the Bugda, Theik-dhat, and Sugdo of the Siamese. It is on account of the phonetic vagueness of these monosyllables, and also on account of the strange corruptions to which words taken down auricularly are exposed, that I abstain from giving long comparative lists. There can be no doubt that many identifications of Gangetic, Lohitic, and Taï words, given by Buchanan, by Leyden, and more recently and completely by Mr. Hodgson, are true. But still they are only persuasive, not convincing. Is it possible, in the present state of our knowledge, to discover the foreign words adopted in one or all of these dialects, if we consider the great changes to which, as we have seen, these foreign words are liable? And still more difficult it is to say, in each case, whether a Siamese word which we compare with a Burmese may not have been taken simply as a foreign word by one of the two languages, instead of belonging to that common Turanian stock of words from which all these dialects originally descended.

It will be an interesting problem, to be solved hereafter, how far the Chinese contains, in its most ancient and best authenticated form, the radical elements from which the Bhotîya, as well as the Taï languages, branched off at different periods. Unfortunately, Chinese civilisation has so powerfully reacted on these languages, in periods within reach of history, that it will always be extremely

difficult to ascend on safe ground to ante-historical times, in which alone a radical community between these idioms and the Chinese could have existed. The numerals hold out a strong hope that the problem will be solved in the affirmative; the pronouns also contain similar indications. But principles will first have to be established by which we can tell foreign and adopted from natural and common words in these dialects. We can tell in French whether a word was taken from Italian, or whether both French and Italian derived it from Latin. The same will have to be done for the Taï, Lohitic, and Gangetic dialects, in their relation to Chinese. The use of prepositions in the Taï declension, and of postpositions in the Lohitic declension, are unmistakeable signs of different stages of grammatical growth respectively attained. They are features as distinct as the use of prepositions and articles in the modern Romanic languages contrasted with the final terminations in Sanskrit or Greek. Grammatical features of this kind must serve as landmarks in the linguistic survey of these countries, and as eras in the historical arrangement of their growth and diffusion.

I subjoin a few instances of similar words in the Chinese, Burmese, and Tibetan, in order to show that they deserve attention, though I quite agree with what Schleiermacher says of them in his Grammaire Barmane, "de telles comparaisons de mots monosyllabiques isolés présentent toujours beaucoup de vague." The question is whether, according to the nature of the case, we have a right to expect more definite proofs.

Chinese, nêng Burmese, nhain	posse.
Chinese, chĭ Burmese, *si*	scire.
Chinese, chă; Canton, chăt Burmese, *sat*	occidere.
Chinese, chè Burmese, *sœy*	removere.
Chinese, nieoû Burmese, nuah	bos.
Chinese, ko Burmese, khu	affixum numerale, aliquis.
Chinese, tchi, ti Burmese, *si*	particula possessiva; genitive.

Many more words might be added, particularly if we compare the Chinese spoken nearest to India,—I mean the Chinese of Canton,—with Siamese, Burmese, and the spoken Tibetan. But who could say, in each individual case, whether the following words, for instance, are ancient common words in Burmese, Siamese, and Chinese, or whether the one language borrowed them from the other?

I. Chinese.	II. Burmese.	III. Siamese.	IV. Tibetan, spoken.	V. English.
ngu,	ngâ,	—	gna,	fish.
foö,	—	fâi,	—	fire.
syuk,	kyiowk,	—	—	stone.
ngunn,	ngwe,	ngun,	ngui,	silver.
thong,	—	thong kham,	jhang chep,	brass.
yâ (evening),	nya,	—	—	night.
chew,	—	chaw,	—	morning.
yun,	—	khon,	—	man.
fu (hu),	pha,	pho,	pha,	father.
mu,	ma,	me,	ama,	mother.
akko,	ako,	—	—	elder brother.
amui,	umma,	—	—	elder sister.
thow,	—	hua,	go,	head.
ngi,	na,	—	na (Changlo),	ear.
li,	—	lin,	li (Changlo),	tongue.
khuok,	khye,	—	kang pa,	foot.
thú,	—	(phung) thong,	phou,	belly.
kie,	—	kin,	ja,	to eat.
teko,	di hu,	—	di,	this.
koko,	ho hu,	—	kho (he),	that.

For the most striking coincidences I should always point to the numerals. Their similarity cannot be denied, and their common origin can hardly be doubted. To suppose that the Taï dialects borrowed their numerals from the Chinese, the Gangetic from the Taï, and the Lohitic from the Gangetic dialects, would be in the teeth of all phonological analogy, and I doubt not, that in Turanian as in Arian philology, the numerals will turn out after all to be the first indisputable ground for establishing the claims to a common descent for the languages of India extra Gangem.

Bhotîya and Taï Numerals.

There are two things which we must bear in mind in looking at the compartive table of the Taï and Bhotîya numerals, including under the latter term the Gangetic and Lohitic dialects.

It is true that, with the exeption of the Taï idioms, which agree better in this respect than any two dialects of Greece or Italy, they do not offer at first sight very striking coincidences. But we must remember, first, by whom these numerals were collected; secondly, by whom they are used. They were collected by men, not always familiar with the sounds which they tried to write down and translate into the Roman alphabet. It is very difficult to catch the mere sound of a language, if we do not understand its meaning; and if two travellers in foreign countries endeavour to write down the words uttered by the same individual, their phonetic sketches are likely to vary as much as two portraits taken under different effects of light.

In two lists of the Kuki numerals, we find katka=keaka; nika=panika; like=ta; rungaka=nga; ruka=koo; and in all these cases, I believe, the same sound was meant to be represented. Ka is one of those generic numeral affixes which attaches itself to all the Kuki numerals, but may be suppressed if other words follow. The word for "one," I suppose, therefore, to be k a t; but t before k becomes obscure,—as, for instance, in the Burmese name of a magistrate, which Judson writes Sit-kai; Cox, c h i k o y; Symes, c h e k e y; and it is the same in octo and otto. Hence katka=keaka. In panika=nika, pa can be proved to be an usual numeral prefix. In lika=ta, we have one of the frequent instances where the strong aspirated l has been mistaken for a t, while in other cases the same sound is represented by an rh, or d, or zh. In Burmese, for instance, t h y o and r h o, pronounced s h o, are all the same word for to wash. In runga=nga, the r u is simply the guttural arsis which naturally precedes the deep n g à, but was not meant to be sounded separately. The same applies to r u k a vice k o o. The greatest difficulty consists in catching the sound of final letters. In Burmese, as Schleiermacher (§ 31.) says, "on est souvent hors d'état de distinguer si c'est un p ou un t qu'on entend prononcer;" and the same grammarian

writes (§ 26.) with regard to the final *k*, that a k is sounded like a k or a t. We need not be surprised, therefore, if the Limbu word for one is written t e e k by Campbell, and t h i t by Mr. Hodgson. On the other hand, we must also take into account the status of the people who speak these languages. Some are brought in contact with civilisation, whether English, Chinese, Hindu, or Burmese, and in their commercial transactions have to use foreign terms. Thus it happens that tribes who possess numerals of their own, prefer to show their knowledge of the Hindustani numerals, when they are questioned on the subject by an English official.

Among themselves, also, the most powerful and governing race probably exercises a certain influence on the languages of subject tribes, and in their bartering transactions Burmese numerals, for instance, would form a common medium between distant hordes subject to the Burmese government. Again, many of these tribes migrate, some are conquered and carried off into slavery. The language of the conquerors has to be learnt by the conquered, who again in turn conquer their conquerors and retaliate on them.

Lastly, the numerals in all these languages are known to have this peculiarity, that they change according to the object numbered. In Burmese n h i t is two; but

two men, is lu (man) nhit-yauk,
two fowls, is kyet (fowl) nhit-gaung,
two pagodas, is tsadi (pagoda) nhit-chu.

In Kachâri these determinative syllables are prefixed. When numerals are applied to human beings, the particle s a is prefixed to the numerals; when applied to other animals, m â; to inanimate objects, t h a ï; to trees, p h a n g; to articles enumerated by pieces, g a n g. For instance, m a n s e s a n a i, two men; b u r m a m a b r e, four goats; p h i t a i t h a i r o, six fruits.

In Mikir, again (where the simple numerals only go as far as six, thorchi, 7, being thorok 6+ichi 1; merkep, 8=10−2; chirkep 9 =10−1), the word b a n g is prefixed when individuals are enumerated; j o n when inferior animals; h o n g and p a p when inanimate objects. For instance, a t e b a n g h i n i, two brothers; j o n p h o n g o a c h o r o n g, five cows, i. e. piece-five cow. The same applies to

Khamti and Siamese, and to the Malay, where these generic particles are put at the end of the numerals. In Malay, for instance, êkor means 'tail,' and is used as a generic exponent for cattle. Sa=one, kerra=monkey; one monkey=sa êkor kerra. Limă=5, kûda, horse; five horses=kuda lima êkor. Now, some of these suffixes and prefixes, if used frequently, and particularly if deprived of their original meaning, coalesce with the numerals. In this manner we must account for long being added to all Dhimal numerals, for sh and shi at the end of the Limbu numerals, for zho in Chepang. In Miri, ko is affixed and a prefixed. The Shendus prefix me, the Gyarung ka; the Manyak affix bi, the Gyami ku. In other cases we find some numerals with, others without suffixes; sometimes we are told that this suffix must be dropped if a substantive follows, sometimes that another suffix must take its place. All these changes are based on one and the same principle of determinative syllables, which in monosyllabic languages are for the speaker what determinatives are for the writer in Egyptian and partly in Chinese.*

After these preliminary remarks, we may venture to trace some of these numerals to their original form and common type. We shall meet with extreme cases, such as, for instance, Nâga vanram, three, being the same as Miri aomko, three. But we know that va or van in Nâga is a prefix, as well as a in Miri; and we also know that ko in Miri is an affix. This leaves us ram=om. Now, the r in vanram or vâram stands between two vowels, where, as, for instance, in the name of the Burmese capital, Amaapuya, i. e. Amarapura, it is dropped in pronunciation. Hence ram and om, both preceded by a vowel, are the same, and so are their secondary forms, van ram and aomko.

We may at once proceed to a consideration of the other words for three, and take "two" afterwards; because "three" is common to the whole class, while "two" will help us to distinguish the Taï from the Bhotîya class. The original type of "three" in these languages was "Sam." Sum, som, san, sun, son, sang, sung, song, are simply varieties of the same sound. This brings together Chinese, all the Taï (exc. Kassia), eleven Gangetic dialects, and one Lohitic. Making allowance for the evanescent final nasal (as in Uraon and

* See Humboldt's Complete Works, vi. p. 402.

Urâo), we may include Horpa and Angâmi Nâga; and considering the difficulty of distinguishing between the four names of the frontier river between the English provinces and Burmah, (it is written San-luen, Salwen, Salûoen and Thalueyn,) we may also include the words with initial th (hts, shy). Thus we embrace the Shan, Burmese, Bodo, Khyeng, Mru, Sak, Tunglhu, and with t=th, the Kumi t u m. In composition we have still to make allowance for s being changed into r, r into l, or its being dropped altogether. The phonetic process of these changes is well known from Sanskrit and other dialects. We now take the prefixes:

With ka, we have, Gyarung, k a-s a m. Mikir, k a-t h a m.
Kami, k a-t u n.
gi, Garo, g i-t h a m.
a, Dophla, a a m. Abor, a n g o m (i. e. a-ong).
Nâga, a z a m and a s a m.
ma, Singpho, m a s u m. Shendu, m e-t h a s.
van, Naga, v a n r a m.

With suffixes we have—
k u: Gyami, s a n k u. Kuki, t ù m k a.
r i: Thochu, k s h i r i.
b i: Mangak, s i b i.
s h i: Limbu, s y u m s h.
y a: Kiranti, s u m y a.
z h o: Chepang, s u m z h o.
l a n g: Dhimal, s u m l a n g.

With suffixes and prefixes—
a-k o: Miri, a|u m|k o. a o m k o.
a-a: S. Miri, a|u m|a.

Thus, out of fifty-four dialects, there is but one, the Kassia l a i, which resists classification, though here the Nâga l e m might serve as a link. Even if the value of these comparisons could be tested simply by phonetic similarity, if the common origin of these numerals was simply a question of phonetic possibility, I should think even then the chain of changes which connects the Chinese word for t h r e e with all the rest less complicated by far than that by which Professor Bopp has tried to connect the Caucasian s e m i, s u m i, s a m i, j u m, with Sanskrit t r a y a s.

I do not attempt a comparison of the words for one, for reasons stated above, though the number of independent radicals to express one, is not so great as might be expected. The same applies to the words for two. Here also the power of forming new words, such as couple, pair, brace, has not been carried to a great extent; and in its limited operation it becomes useful and instructive, because it assists us in establishing lines of demarcation between the Taï, and the other dialects. The type for two was NYA, with a decided tendency, however, towards the vowel *i*. The softened or mouillé sound of ny, is sometimes expressed by gn, sometimes by ng; nh also seems intended to indicate the same sound. In other dialects this mouillé letter becomes evanescent, and the simple nasal only remains. It may seem doubtful whether instead of NYA, the original form might not have been NYAT. Several forms occur with a final t. But as there are other forms with a final s, it seems more plausible to look on both t and s as additional letters, though their occurrence in distant dialects may be taken as a sign that this additional consonant dates from an early period. After these remarks, seventeen dialects can be traced back to nya or nyat, without affix or prefix. The affixes and prefixes used in the other dialects are the same as for "three." The only new ones are kching in Changlo, and pan in Khyeng: Anomalous forms are Kiranti, hasát, Nâga, ih, Miri, pre. It is important as a distinction that the Taï dialects have their own word for "two," which is the same as "three," only with a final guttural nasal, sang, instead of the labial nasal in sam (three). We may conclude from this that the separation of the Taï dialects from the common stock took place previous to the separation of Tibetan and Burmese. A third base for "two" is ar in Gyami and Kassia; it may be connected with the Chinese e-ul.

The original base of "four" was "Chi," a sound which in these dialects is sometimes palatal, sometimes lingual, sometimes subdental, accordingly as it is produced by bringing the tongue in contact with the palate, the root of the teeth, the gum, or the teeth, without, however, allowing it to become a pure dental or a pure guttural sound. From chi this sound may pass to zhi, and from zhi it may run into a soft s. It may also approach a lingual *d*, and then merge into the lingual *r* and *l*. Similar changes have been pointed out before. Although, therefore, the written words for "four" vary considerably in

appearance, yet it is frequently the same sound which was meant to be represented, only that it is a vague sound, and a sound for which the European alphabets have no distinct sign. Chinese and Taï have a decided s, followed by i, with the exception of the Kassia, which has sau instead of si.

Zh occurs five times, or eight times if we include the soft initial *d*, the Sanskrit *d* (द). The *hl*, which is the Sanskrit *dh* (ढ), and which is also written *lh* or *l*, occurs eleven times, including the cases where it is joined by common prefixes. But there is one prefix which occurs so frequently that it seems to be more than a prefix. It may have been by itself a word for "four," which, as is usual in monosyllabic languages, was joined to the other word for "four," in order to make the intended meaning more apparent.* This word is pi, and it occurs by itself as the word for four in Newar, pi, Changlo, phi, Miri, a-pi-ko, and Abor, a-pi. Together with lhi or rhi, we find it in Takpa, p|li, Garung, p|li, Magar, bu|li, Murmi, b|li, Lepcha, pha|li, Chepang, p|loi|zho, Mikir, phili, Dophla, a|p|li, Nága, pha|le, pha|li, pi|li, Kumi, palu, Shendû, pu|lli, and in Bodo, b|re, Garo, b|ri, Nága, pa|zr, and Sak, p|ri. What raises a doubt, however, as to the origin and meaning of the initial labial sound in these words, is that the same labial prefix occurs sometimes before "five" in the same dialects which add it to "four," though they do not use it before any other numerals. In two cases "five" is expressed by the single labial, ba, me-pa. In Tibetan, as pointed out by Mr. Hodgson (1853, p. 59), zhi (four) is written bzhi.

"Five" in Taï is HA, except the Kassia san. In the other Bhotîya dialects the original base of "five" was GNA. This may be contained in the Chinese ung, for GNA can also be represented by NGA. In the Bhotîya class GNA is so little disguised, that no explanation is required. We might naturally expect na and ga, instead of nga; but we also find more violent changes, such as gwa and wa; and still more anomalous, ma in pu-ma. Among the prefixes the constant labial has been already mentioned. This is sometimes followed by l, so as to render the origin of forms such as pi-li-ngo-ko rather problematical.

* An analogous feature of the Malay languages is pointed out in Mr. Crawfurd's Malay Grammar, page 81.

Six" in the Taï languages is RUK, HUK, and in Chinese LU and LOK. Now it will easily be seen that the various forms of one and the same numeral in the Taï languages are nothing but phonetic varieties of the same word. Nor is it difficult to account for the transition of r into l, or for the omission or addition of a final k. (See page 396.) With all these allowances, however, we do not obtain a base which will explain all the corruptions of the Bhotiya words for "six." A base which would account for most, would be RHU, only that we should have to admit two prefixes, t and k. The simple RHU would account for forms like ru and ro, and also for dhu and thu, if these two are meant as lingual aspirates. The prefix t would then explain forms like ta ru, tau, tarok, thorok, and soru; and the prefix k would account for the rest, such as kro, krukzho, khyauk (ray in Burmese). Still even thus a residuum remains, which it is better not to attempt to analyse until we receive more accurate lists than those which we have at present, where, as for instance in Garo, "six" is given in one list as krok, in another as dok.

For the same reason I abstain at present from tracing the remaining numerals from seven to ten back to their original types Their general likeness leaves no doubt that they also proceeded from one common source. We find, in spite of occasional deviations, a sufficient number of almost identical words for seven, eight, nine, and ten in the most distant members of the Bhotîya family to be satisfied as to their common origin. We must make allowance, however, for this, that some languages express seven by 6+1, as for instance thorchi, which stands for thorok+chi. Again, eight is expressed by a compound 10—2, and nine by 10—1; for instance, in Mikir, where 10 is kip, 9 chirkep, 8 pirkep. Yet, with all these exceptions, anomalies, and corruptions, this one important fact remains established, that the Bhotîya and Taï members of the Turanian family show in their numerals their former unity and continuity as distinctly as the languages of Arian origin.

Seventh Section.

The Malay Languages.

In the first part of this Letter I endeavoured to show that, where the means are wanting to enable us to trace the genealogical connection of large groups of languages, it is yet possible to classify them on grounds merely morphological. In a nomadic state of language words are liable to such rapid changes, and those arising not from phonetical corruption, but from actual loss and a continued reproduction of words, that, after some generations, one language may be split into two dialects, in which the most common objects are expressed by different terms. Nomadic languages shed their words almost in every century; while political languages keep their plumage for thousands of years. It would be hopeless, therefore, to attempt to test the relationship of nomadic dialects by the same agencies that bring out the affinities of political languages; nor would it be right to deny their proper weight to coincidences in the leading principles of grammatical formation, which, like a natural instinct, may live on where all external signs of relationship are obliterated. "A language," as Humboldt says, "cannot be looked upon as a mere aggregate of words. Every language is a system by which the mind embodies an idea in audible expression. It is the business of the philologist to discover the key to this system. It will then appear that races not only express their ideas in the same manner, but follow the same path in their forms of speech."

§ 1. *Formal Coincidences between the Malay and Taï Languages.*

It is from this point of view that the Taï and Malay languages may be ranged together, as coinciding most strikingly in some of the most characteristic features of their grammar. It is not the geographical proximity of the Malays and Siamese races which suggests this idea. The settlement of the Malays on the continent of Malacca is generally considered as of modern date. Nor is it a mere community of words which led to this supposition. Here again, unless our comparison

extended over the whole dictionary of these two races, it would be impossible to say whether the Siamese had borrowed from the Malays, or the Malays from the Siamese. Nor do I wish to prove that Siamese and Malay are lineal descendants of the same parent. But there exists in their grammar an instinct so peculiar and constant, that it is in vain to try to account for it without the admission, that before the dispersion of the descendants of Tur, the nomads of the Pacific received their first grammatical impressions together with the rest of the Turanian family; that after their first separation they continued for a long time together with that branch of the southern Turanian division which occupies the valley of the Brahmaputra and extends to the peninsula of Malacca; while all that seems to be Arian in their grammar and dictionary, and has been used by Bopp to prove the original connection of the Malay and Arian languages, was simply imported during a later political and religious intercourse between the Arian colonists of India and the Turanian inhabitants of the Indian Archipelago.

The following are some of the leading features which the Malay share in common with the Taï languages. For the Malay I refer to Mr. Crawfurd's Grammar; for the Taï, to the Grammatical Outlines of Mr. Robinson, chiefly taken from the Khamti. "This," to quote Mr. Robinson's words, "in common with the Siamese, Laos, Shyan, and Ahom, is only a dialect of the language usually known as the Taï; a language more or less prevalent through all that wide tract of country extending from Siam to the valley of the Brahmaputra. In a language so extensive in its use, it might be conjectured that local peculiarities would have given rise to a great diversity of dialects, so that the Khamti and Siamese, spoken at the extremities, would have presented but few links of connection. On the contrary, however, we find that the discrepancies between the two are very trifling." This shows that the Taï must once have passed through a period of literary cultivation and grammatical concentration, and that the Taï dialects spoken at the present day are but varieties of one common type.

Mr. Brown's investigations led him to the conclusion, that upwards of nine tenths of the fundamental words are the same in Siamese and Khamti, with the exception of a few slight variations of pronunciation. These variations are mostly confined to a few letters: viz.

ch, which the northern tribes change to ts; d, for which they use l or n; r, which becomes h; and ua, which is changed for long o.

"Different systems of writing," as Mr. Robinson remarks, "have been introduced to express the sounds of the different dialects of the Taï. The Khamti and Shyan alphabets are derived from the Burmese; the Laos is nearly related to Burmese, but more complete and better adapted to the wants of the language than the Shyan; whilst the Siamese character bears only a remote resemblance to Burmese."

1. In Khamti, inflections are unknown, and the accidents of case, mood, and tense are expressed by means of particles.

In Malay, there are no inflections to express gender, number, person, time, or mood.

2. Words or particles which serve as the exponents of these grammatical relations, and which in the Ural-Altaic languages are always placed after the root, may, both in Malay and Taï, be used as prepositions as well as postpositions.

3. The relation of the genitive may be expressed by mere juxtaposition. But while in Chinese the first word is understood to be in the genitive, the governed word, or what we call the genitive, stands last both in Malay and Taï.

Examples: Taï: Hang, a tail; pa, a fish.
hang pa, a fish's tail.

Malay: Tuwan, master; âmba, slave.
Tuwan âmba, the master of the slave;
âmba tuwan, the slave of the master.

4. The accusative takes no preposition in Khamti and Malay; in the latter, pâda (to) may be added.

The accusative follows the verb in Siamese and Malay.

5. The other cases, if cases they can be called, are formed in Taï and Malay by prepositions.

a. Dative in Taï: Hang.

Ex. Hang[2] man[3] hau[1] da, Give[1] to[2] him.[3]

a. Dative in Malay: ka, kapâda.

Ex. Maka kata raja kapâda estrina, The king said to his spouse (strî).

b. Ablative in Taï: luk, from.
in Malay: dâri, ka-luwar, from.

c. Locative in Taï: ti, in.
in Malay: di, in.

Ex. Di nâgri Tringanu, The country of Tringganu.

6. The Khamti noun admits of no plural. The singular, where necessary, may be expressed by the addition of the numeral one in Siamese and Malay. Plurality in Malay is expressed by an adjective having this sense: as, bañak, many; sâgala and sakalian, all; and the numerals. In Khamti, in those instances where the noun does not express a collective or plural idea, a numeral added to it renders the expression sufficiently intelligible.

7. Gender is not expressed; but to indicate the difference of sex in the inferior animals, the term thuk is used to denote the male, and me the female in Khamti.

Ex. A horse: Masc. ma thuk; Fem. ma me.
A cat: Masc. miau thuk; Fem. miau me.

In Malay, a male of the lower animals is expressed by the adjective jântan; a female, by bâtina.

Ex. A horse: Masc. kuda jantan; Fem. kuda bâtina.
A cat: Masc. kuching jantan; Fem. kuching bâtina.

For individuals of the human family different words are used in Taï and Malay: sau and ying, in the former; laki and pârâmpüan or estrî (Sanskrit), in the latter.

Ex. Taï: Luk sau, son; luk ying, daughter.
Malay: Anak laki, son; anak pârâmpüan, daughter.
Taï: Pi sau, brother; pi ying, sister.
Malay: Saudara laki, brother; saudara pârâmpüan, sister.

Exceptions where distinct words are used, are,
Malay: Pa, father; ma, mother.
Taï: Po, father; me, mother.

8. In Taï, the adjective follows the substantive.

Ex. Kun ni, a good man.
Ma ma-ni, a bad (not-good) dog.

In Malay, an adjective, by its form, is not distinguishable from the noun; for the same word is often either, according to position. It is its place, following the noun, which marks the word as expressing quality.

Ex. Putish kayin, the whiteness of cloth.
Kayin putish, white cloth.

9. In forming the comparative degree of the adjective in Khamti, the word leu, beyond, is added to it in its positive form.

In Malay, the comparative is expressed by dâripâda; dâri meaning from, pâda, with.

Ex. Khamti: Yaü[1] leu[2] hün[3], great[1] beyond[2] the house[3]; or, Noi[1] sung[2] leu[3] peun[4], a mountain[1] high[2] beyond[3] all[4]; i. e. the highest mountain.

Malay: Bâyik[1] dâripâda[2] samuwaña[3], good[1] from[2] with[3] all; or, Lâbih bâyik dâripâda samuvaña, very good from with all, i. e. best.

10. In the numerals, no coincidences can be pointed out between Malay and Taï; and the great similarity of the Taï numerals with Chinese, makes it not improbable they were actually adopted from Chinese. But the Malay numerals participate in a feature peculiarly Turanian, that of forming the words for eight and nine, by 10—2 and 10—1. Dulapan, eight, contains du, 2; sâmbilan, nine, contains sa, 1; as determinative elements. If salâpan is used for eight, this can only be explained as a mistake; and in the Sunda dialect of Java, salâpan has retained its original meaning of nine, dâlâpan, of eight. Different etymologies have been given of lâpan, and bilan, which may be seen in Humboldt, Bopp, and Buchanan; but they do not affect our argument as to the Turanian character of these formations.

11. Another feature deserves to be pointed out with regard to the numerals, connecting the Taï languages most closely with the Malay. Mr. Crawfurd describes it in the following manner:

In the enumeration of certain objects, the Malay has a peculiar idiom, which, as far as I know, does not exist in any other language of the Archipelago. It is of the same nature as the word "head," as we use it in the tale of cattle; or "sail," in the enumeration of ships; but in Malay, it extends to many familiar objects.

Âlai, of which the original meaning has not been ascertained, is applied to such tenuous objects, as leaves, grasses, hairs, and feathers.

Bâtang, meaning stem or trunk, to trees, logs, spars, spears, and javelins.

Bântak, of which the meaning has not been ascertained, to such objects as rings.

Bidang, which means spreading or spacious, to mats, carpets, thatch, sails, skins, and hides.

Biji, seed, to corn, seeds, stones, pebbles, gems, eggs, the eyes of animals, lamps, and candlesticks.

Bilah, which means a pale or stake, to cutting instruments, as knives, daggers, and swords.

Butir, a grain, to pepper, beads, cushions, pillows, and, strangely enough, to brooks and rivers.

Buwah, fruit, to fruit, loaves, cakes, mountains, countries, lakes, boats and ships, houses, palaces and temples.

Ekor, tail, to beasts, birds, fishes, and reptiles.

Kayu, which means wood, to any object rolled up, as a piece of cloth.

Keping, a sheet, to any foliacious object, as a sheet of paper.

Orang, man or person, to human beings

Puchuk, which means literally top, to cannon and small-arms, to candles and torches, and to letters or missives.

Rawan, which is literally gristle or cartilage, to all descriptions of cordage.

Ex. Ada sâorâng saudagar kapâda sâbuwah nâgri, There was one-man merchant, in one fruit (of a) country.

Bad'il limapuluh puchuk, dan pad'ang lima ratus bilah, Fire-arms, fifty pieces, and sword five-hundred stake.

Let us now compare the Khamti. Here, according to Mr. Robinson, numeral affixes, or as they have sometimes been called, generic particles, are in common use. These particles are affixed to numeral adjectives, and serve to point out the genus to which the preceding substantive belongs.

To is the numeral affix applied to animals. When the number to be expressed is one, the generic particle precedes the numeral; in every other case it follows: —

Ex. Pe^{2} nan^{1} luk^{5} on^{3} yang^{4} song-to.^{5} That^{1} goat^{2} has^{3} two^{4} kids.^{5}

Bai is the numeral affix applied to such nouns as leaf, paper, umbrella.

Nue is applied to things round.

Thep, and phen, to flat substances.

Phün, to pieces of cloth.

Sen, to things having length.

Ho, to bundles, packets, and the like.

Sem, to sticks, posts, spears.

Khot, to ropes, and such articles as can be coiled up.

Ban, to villages, hamlets, and towns.

The use of these numeral affixes is evidently based on a peculiarity of conception, remarkable as any in the grammar of nations. The nations who employ these generic exponents, were incapable of conceiving quantity in the abstract; a defect in their logical powers more suggestive to the ethnologist than any peculiarity in the anatomical structure of their skull. We find the same generic particles in Burmese, where, as in Malay and Taï, they are placed after the numerals; while, in Kachari and Mikir, they are placed before. In its most developed state, we find the same custom in Chinese. There also the numerical exponent stands after the numeral and before the substantive, except in accounts, when, as in Burmese, the noun is put first, then the numeral, and last the generic term. These generic terms were collected by P. Basilius in his Dictionnaire (p. 933), and by Morrison in his Chinese Grammar (pp. 37—59), and alphabetically arranged by Endlicher, in his Chinese Grammar. Humboldt discusses them in his work on the Kavi language (p. 428). Besides the Chinese, the Taï, Burmese, and Malay languages, the Mexican also employs similar generic exponents.

12. The pronouns in Khamti are the only words which have a separate form for the plural:

Kau, I,	becomes	Hau, we.
Maü, thou,	,,	Maü su, you.
Man, he,	,,	Man khau, they.

In Malay, the pronouns afford the only instance of a distinction of number which exists in the language:

Ku, I,	becomes	Ki-ta, we.
Mu, thou,	„	Ka-mi, you.
Ña, he,	„	Marika, they.

The coincidence of the radical portion of the pronouns, particularly in the first and second persons, requires no comment.

13. Malay and Siamese are both distinguished by an extraordinary number of pronouns of the first and second persons, which are used according to the rank which the speaker or the person addressed is supposed to hold. They are in reality not pronouns, but substantives, meaning servant, lord, etc.

14. The relative pronoun in Khamti is Yang; in Malay, Yang.

15. The Malay has possessive pronominal suffixes, which are really the personal pronouns in their shortest forms, appended to nouns.

For instance: ârta-ku, my property.
ârta-mu, thy property.
ârta-ña, her property.

The same phrases can be formed in Khamti, where
mü, is hand, man, he; and
mü man, his hand.

16. Demonstrative pronouns:

Malay:	Khamti:
Ini, this.	Annai, this.
Itu or nun, that.	Annan, that.

17. Interrogative pronouns:

Malay: Apa, who? Khamti: Phaü, who?

18. The verb in Malay and Taï is so simple that we can hardly expect many coincidences between these two languages, which might not be pointed out in other dialects standing on the same low level of grammatical development. A few, however, may here be mentioned. There are no terminations in either, to express the persons of the verb; the root remains the same whatever pronoun may precede it; and even the particles used to indicate the past or future, the transitive or intransitive, the potential or subjunctive mood,

are frequently omitted, particularly in conversation. "In Malay," as Mr. Crawfurd says, "we can fancy a period in the history of the language, in which these particles may not have been used at all, the single radicals being found sufficient for all the ideas of a rude people and an uncouth tongue." During this state of language the absence of all formal distinction between nouns and verbs, would naturally bring out that other feature of Turanian grammar to which we have frequently alluded before, and which Mr. Crawfurd describes in the following terms:—"With the exception of some pronouns, nouns representing material objects, the prepositions which stand for the cases of languages of complex structure, and a few conjunctions and adverbs, any part of speech may, by the application of inseparable particles, be converted into a verb. Thus the nouns ati, the heart, tuwan, master, prang, war; the adjectives, bayik, good, bâtul, straight, putih, white; the pronouns, aku, I, and di-ri, self; the prepositions ad-ap, before, bâlakâng, behind, âmpir, near; and the adverbs lâkas and sigra, quickly; are all convertible into verbs by the application of certain inseparable particles."

19. Three tenses can be traced in Khamti; the present, the past, and the future. In the present we have the verb in its complete state; in the past, a particle is added, denoting completion or fulfilment; and another particle, expressing will or determination, makes the future:

Ex. Kau kin, I eat.
Kau kin yau, I have eaten.
Kau ta kin, I shall eat.

In Malay, time is often left to be inferred; but when it becomes necessary to state present time, such adverbs as sâkarang, now, or the verb ada*, to be, are employed. A preterite or past time is expressed by the adddition of tâlah, past, sudah, enough, abis, ended, lalu, gone. Future time is expressed by the verbs mau, to will, and andak, to desire; and by the preposition âkân, to, for instance,

Aku kan, I eat.
Aku kan lalu, I have eaten.
Aku akân kan, I shall eat.

* In Siamese, the verb to be, ayû, is used to form the present.

20. A potential mood is commonly expressed in Khamti by pa, can:

Ex. Kau kin pa, I can eat, I could eat.

In Malay, a potential mood is expressed by the verbs bulih and dapat, used as auxiliaries; and which, literally translated, mean to can or be able, and to get or find; but which have the English sense of can or may:

Ex. Aku kan dapat, I can eat.

21. Nouns are derived from verbs in Malay, by applying to a radical the affix an, or the prefix pâ, or both together:

Ex. Dagang, to trade; pâ-dagang, a trader.
suruh, to order; suruh-an, a messenger.
asâp, to smoke; pâr-asâp-an, a censer.

In Khamti the participial form is denoted by the particle an, put before the verb:

Ex. An-kin, eating.

A language which shares so many grammatical principles in common with Khamti and Siamese, and differs from Sanskrit on every essential point of grammar, can no longer be counted as a degraded member of the Arian family, however great the authority of him who first endeavoured to link Sanskrit and Malay together. Without entering into the question of the spreading of the Malay dialects, and the connection of the Malay and the other Polynesian idioms, we may safely assert that the grammatical fibres of the Taï and the Malay languages hold closely together; and that the Malays, whatever their later wanderings may have been, must, in their first state, be traced to the Continent of Asia, and to the same home from which the inhabitants of the whole Eastern peninsula proceeded southward in times unreached by history or by tradition. If the Malay is thus secured to the Turanian family, the whole question of its connection with the Polynesian languages will have to be viewed in a new light, and the conflicting opinions of Humboldt and Crawfurd may receive a solution consistent both with that fundamental unity which struck the comprehensive genius of the former, and the startling discrepancy of local varieties that attracted the notice of so patient a collector and so careful an investigator as Mr. Crawfurd.

§ 2. *Humboldt's and Crawfurd's Views on the Languages of Polynesia and the Indian Archipelago.*

The following extracts from Humboldt's and Crawfurd's works will show the present state of this disputed question. I have availed myself of an excellent article "On the conflicting Views of European Scholars, as to the Races inhabiting Polynesia and the Indian Archipelago," by the Honourable Sir Erskine Perry, in which the evidence on both sides is summed up with fairness and lucidity. Sir Erskine gives the passages from Humboldt in so masterly a translation, that we hope he may soon publish a more complete translation, which, he tells us, he has prepared for educational purposes. Humboldt's view on the Malay language, as given in his posthumous work, "On the Varieties of Human Language and its Influence on the Mental Development of Mankind," may be stated in his own words, as follows:

"The races of Malay origin, with respect to locality, government, history, and, above all, language, are perhaps more singularly connected with races of different cultivation than any other people in the world. They inhabit only islands and island groups, but these extend over so wide a range as to afford unmistakeable testimony to their early acquaintance with navigation. Their settlement on the Continent at Malacca scarcely deserves to be mentioned here, as it is of modern date, and proceeded from Sumatra, and that on the coasts of the China Sea, and of the Gulf of Siam, at Champa, was a still later occurrence. With these exceptions, we are unable to trace, with any certainty, even in the most remote history, the existence of Malays on the mainland. If from these races we separate those who in a strict sense deserve the name of Malays, and who, according to undeniable grammatical researches, speak closely allied tongues, easily intelligible to one another, we shall find them settled (only mentioning those points where the inquiry into languages has had sufficient materials to work on) in the Philippines, — where the language is to be found in the richest development of forms, and in its most original condition, — in Java, Sumatra, Malacca, and Madagascar. A large number of words, however, of unquestionable relationship, and even

the names of a considerable number of islands, betoken that the islands in the neighbourhood of the above localities are peopled by a similar race, and that even the more strictly so-called Malay language extends itself over all that portion of the South Pacific which reaches from the Philippines southerly to the West Coast of New Guinea, and, more westerly, to the chain of islands which joins the eastern point of Java, and runs up between Java and Sumatra to the Straits of Malacca. It is a matter for regret that the large islands of Borneo and Celebes, to which probably all that has been said above may apply, have not yet had their languages sufficiently examined to allow of any conclusion being drawn on grammatical grounds.

"To the eastward of the zone here drawn of the pure Malay language, from New Zealand to Easter Island, thence northerly to the Sandwich Islands, and then back again westwards to the Philippines, a race of islanders is to be found, who display most unquestionable traces of an old connection in blood with the Malays. This is proved by the number of similar words, and essential coincidences of physical structure, in the languages whose grammar we know intimately, such as those of New Zealand, Tahiti, the Sandwich Islands, and Tongu. A like similarity is to be found in manners and customs, especially where pure Malay customs are recognisable, unadulterated by Indian usages. Whether the races to the north-west in this part of the Pacific belong wholly or in part to the latter division, or to the Malays in the strict sense; or whether they form a connecting link between the two, cannot yet be decided with our present materials, as even the researches which have been set on foot with respect to the language of the Mariana Group have not yet been made public. The whole of these races possess social institutions sufficiently complicated to make it improper to exclude them wholly from the class of civilized nations. They have a well-established, and by no means simple system of government, of religious doctrines, and of usages, and some of them possess a species of spiritual government; they display skill in various arts, and are bold and experienced seamen. We find amongst them in several spots the remains of a sacred language, unintelligible even to themselves; and their custom of recalling formally obsolete expressions into life on certain occasions, speaks not only to

the richness, age, and depth of the language, but also to their powers of observation as to the effect of time in modifying circumstances. With all this they allowed, and still partly allow, barbarous practices inconsistent with civilisation.* They appear never to have acquired the art of writing, and, consequently, are deprived of all that literature which is founded upon it, although they are by no means wanting in fanciful legends, impressive eloquence, and poetry in defined rhythmical cadence. Their languages, however, have not sprung out of any corruption or change of the Malay tongue of the narrower zone, but we may rather trace in them an uniform and original condition of the latter.

"Along with the race thus described in the two divisions of the Great Southern Archipelago, we meet, on some of the islands, with people who, from their appearance, must be attributed to a wholly different stock. Both the Malays in the stricter sense, and the more eastern inhabitants of the South Sea, belong without doubt to the same human family, and they form, if one makes an accurate division by colours, the class passing from the light brown into white. The races of whom we are now speaking approximate, by their black skin, occasionally by their woolly frizzled hair, and by their peculiar features and build, to the African Negro, although, according to the most trustworthy evidence, they are nevertheless essentially different, and can by no means be considered as the same race. Writers on these countries, in order to distinguish them from Negroes, call them either Negritoes or Austral-Negroes, and but few of them exist. Both in the islands inhabited by the Malay races, and in the Philippines, they usually occupy the middle of the island, and inaccessible hills, to which they appear to have been gradually driven by the more numerous and powerful white race. We must carefully, however, distinguish them from the Haraforas, or Alfuris, the Turajos of Celebes, who are to be found in Borneo, Celebes, the Moluccas, Mindenao, and some other islands. These latter appear to have been driven out in a similar manner by their neighbours, but belong to the light brown race; and Marsden attributes their disappearance

* Mr. Crawfurd mentions a somewhat cultivated race in Sumatra, well acquainted with letters, who appear to be the only literary cannibals recorded in history. —E. P.

from the coast to Mahomedan persecution. In wildness they approximate to the black race, and they constitute a population of uniformly low development. Other islands, amongst which are some large ones, like New Guinea, New Britain, New Zealand, and some of the Hebrides, contain these Negro races only, and the inhabitants of the large continents of New Holland and Van Dieman's Land, so far as there has been hitherto opportunity of becoming acquainted with them, belong to the same race. But although this race in all the localities here indicated displays general marks of similarity and relationship, it is by no means thoroughly established how far essential differences of race exist among them, for their language has not yet been investigated so as to satisfy the exigencies of a thorough grammatical inquiry. We have only the materials collected by the Missionary Trelkeld as to one race in New South Wales, by which we are enabled to form any judgment as to its organic and grammatical structure. The race everywhere distinguishes itself by a greater wildness and barbarism than appears in the lighter races; and the differences herein relate solely to their greater or less intercourse with the latter. The inhabitants of New Holland and Van Dieman's Land appear to stand on the lowest grade of civilization which has ever yet been occupied by mankind. It is a remarkable phenomenon to meet, even on the peninsula of Malacca, the light and dark races in contact with one another; for the Semangs, who occupy part of the mountain range of that country, are by most unquestionable testimony, a woolly-haired Negrito race. As this is the only point of the mainland of Asia where the fact occurs, it is unquestionable that immigration must have taken place here at a comparatively recent period. Among the lighter races, also, as the Malay expression *orang benna* (men of the country) appears to prove, more than one immigration seems to have occurred. Both occurrences only show, therefore, that the same kind of connection between countries at different periods brings about similar historical facts, and, consequently, to this extent there is nothing remarkable in them. In reference to the state of culture of the different races of mankind in this Archipelago, however, any explanation by means of colonization becomes deceptive. To enterprising nations, the sea offers rather a means of easy connection than of distinct separation,

and the general diffusion of bold active seamen, like the Malays, explains itself in this way, by short trips from island to island, sometimes intentionally made, and sometimes by their being driven away through the violence of the prevailing winds; for activity, expertness, and knowledge of sea-craft, are not characteristics of the proper Malay only, but are to be found amongst the whole of the light brown race. I need only mention here the Bugis of Celebes, and the South Sea Islanders. But if this description of the Negritoes, and of their diffusion from New Holland to the Philippines, and from New Guinea to the Andamanns, is correct, these races must have deteriorated more than is usually supposed from a more civilized condition, and have become wild. Their present condition rather favours the hypothesis, which is not in itself improbable, of revolutions of nature, old traditions of which still exist in Java, by which a populous continent became broken up into the present island groups. Men, like ruins, might, so far as mankind could survive such convulsions, have remained on the scattered island tops. Both of these explanations, perhaps, if united, so as to consider the dislocation by the powers of nature as occurring during a lapse of centuries, and distinguished from the connection through human colonization, might perhaps afford us some sort of account of the various races which now appear.

"Tanna, one of the Hebrides, but a word of Malay origin, New Caledonia, Timor, Ende, and some other islands, possess a population which is left doubtful after inquiry whether we are to reckon it, with Crawfurd, as a third race, or, with Marsden, as a mixture of the two others; for the inhabitants, in their physical make, woolliness of hair, and colour of skin, occupy a middle place between the light brown and black races. If, at the same time, a similar affirmation can be made as to their language, this circumstance would tell authoritatively for their being a mixed race. There still remains an important question, but one very difficult to decide from the materials at hand, viz., how far older and more intimate mixtures of the white and black races have occurred in these countries, and how far gradual changes may thereupon have ensued in language, and even in colour and growth of hair, the woolliness of which, moreover, in some localities, is cultivated as an ornament. To judge correctly of the

Negro races in their pure form, we must always commence with the inhabitants of the Great Southern Continent, as between these and the brown races no direct contact is conceivable, and according to their present condition it is difficult to suppose any kind even of indirect connection. The remarkable fact still remains, that many words in the languages of these races, although we certainly possess only a few of them, bear an evident likeness to the words of the South Sea Islands.

"Amid these geographical relations, in some instances amounting to close neighbourhood, certain Malay races adopted Indian civilization to such an extent that perhaps no similar example is to be found of a nation undergoing such a complete infusion of the national spirit of another race, without losing its own independence. The phenomenon as a whole is very intelligible. A large part of the Archipelago, and the most attractive from its climate and fertility, lay at a very short distance from the great continent of India — opportunities and points of contact were consequently abundant. But where such occurred, the preponderating influence of a civilization so ancient, and so diffused through every branch of human activity as the Hindu, could not fail to attract towards it other nations of active and impressionable temperaments. This was rather a moral than a political revolution. We recognise it in its consequences in the Hindu elements, which undeniably present themselves to view in a certain range of Malay races; but how did this mixture arise? On this point, even amongst the Malays, as we shall see, nothing but obscure and doubtful traditions exist. If inroads of powerful races and extensive conquests had produced this state of things, clearer traces of such political events would have been preserved. Intellectual and moral causes work, like nature herself, in silence, and their operation is similar to the growth of a seed, eluding observation. The *modus operandi* in which Hinduism struck root amongst the Malay races, proves that as a mental spring of action it excited the imagination, and became powerful through the impressions of wonder which it produced in races susceptible of culture. In India itself, so far as I know, we find no mention of the South-eastern Archipelago in Hindu history or literature. Even if Lanka were perhaps considered to extend further than the limits of Ceylon, this was only dark and

uncertain surmising, or mere poetical license. From the Archipelago itself, on the other hand, as we may well conceive, nothing proceeded which could have any influence on the mainland. It was India that exerted a substantial influence, and perhaps even by colonization, which was not intended to keep the mother country in view as a home, or to preserve relations with it. Reasons for establishing settlements might be various. How far Buddhist persecution might have co-operated, I shall have to discuss hereafter.

"But to explain properly the mixture of Malay and Hindu elements, and the influence of India on the whole of the Indian Archipelago, we must discriminate between its different modes of operation, and thereby commence with that which, early as it may have began, has continued to the latest times, and consequently has left the clearest and most indelible traces. It is not only the influence of a spoken foreign language which in this case, as in all mixtures of nations, operates powerfully, but also the whole of the mental culture which springs out of it. This phenomenon is unquestionably apparent in the introduction of Indian language, literature, myths, and religious philosophy into Java. The whole purport of the following work is to discuss this question, but principally with reference to language, — I therefore must content myself here with this mere allusion. This species of influence affected only the Indian Archipelago, properly so called, and the Malay zone in its stricter sense; but possibly not even the whole of the latter, and certainly not to an equal extent. The focus was so undoubtedly Java, that we may reasonably doubt whether that island was not the immediate source from which it extended itself over the rest of the Archipelago. Independent of Java, we find, however, distinct and complete proofs of Indian civilisation amongst the proper Malays and Bugis of Celebes. A true literature, from the essential elements of the formation of language, is only capable of existing contemporaneously with a written character which is in daily use. It is an important fact, therefore, for the mental development of the South-eastern Archipelago, that just that portion of the island group which has been designated as strictly Malay possesses an alphabetic character. A distinction not to be overlooked, however, here occurs. The alphabetic character in this part of the world is Indian. This arose

naturally from the intellectual relations of these countries, and is visible in most of their alphabets, with the exception, perhaps, of the Bugis, in the similarity of the letters, not to mention their arrangement to designate sounds, which undoubtedly does not furnish any decisive proof, as it might have been adopted subsequently to a foreign alphabet. Nevertheless, a complete similarity, with merely an adaptation to the simpler phonetic system of the indigenous tongues, occurs only in Java, and perhaps at Sumatra. The character of the Tagalis and of the Bugis is so different, that it may be regarded as an example of alphabetic invention. In Madagascar the Arabic character has planted itself, as the Indian has done in the centre of the Archipelago. At what period this occurred is uncertain. And there does not appear to be any trace of an original character which it displaced. The use of the Arabic character amongst the Malays proper decides nothing as to their intellectual relations, which we are now discussing, for it is notoriously a modern introduction. I have already mentioned the total want of all writing in the South Sea Islands, and amongst the woolly-haired races. The traces of Hinduism which we have here in sight are so distinct that we may recognise them everywhere without difficulty, and we can distinguish them as foreign elements. No true intermixture or amalgamation is here discernible, but a mere mosaic union of foreign and native. So far as relates to manners and customs, we may clearly recognise in Indian antiquity the foreign words in the Sanskrit descended to us, and which have not entirely lost their grammatical forms: we may even discover the laws which governed the transplantation of foreign elements of speech into a native soil. This is the foundation of the cultivated and poetic language of Java, and is closely connected with the introduction of literature and religion. All that has been said above undoubtedly has not operated with the language of the people, and still less can it be affirmed, that merely because Indian words are to be found in it, they were introduced in a similar manner. In thus tracing minutely the operations of the different modes of Indian influence, two deeply-seated questions arise, suggested by actual phenomena, but which are extremely difficult to answer accurately, viz. whether the whole of the civilisation of the Archipelago is traceable to an Indian origin; and whether,

from a period anterior to the rise of literature, and to the last and most complete development of the language, any connection existed between the Malay and Sanskrit languages, which is still capable of being traced in the social elements of speech ?

"I am inclined to answer the former of these questions in the negative. It appears to me to be made out that the brown race had an original civilization of their own. It is still to be found in the Eastern portion, and is not altogether unrecognizable in Java. It may, indeed, be said, that the population of the Archipelago principally issued from its centre, where the influence of India was most powerful, and extended itself thence towards the east and west, so that the distinct Hindu element becomes more diluted at each extremity. This proposition, however, is supported, less by any distinct similarity than by remarkable coincidences in manners, which have nothing specially Indian to distinguish them, amongst the races of the central and eastern parts of the Archipelago. One sees also no reason why we should deny to a race like the Malay a self-developed civilization, in whatever subsequent direction the march of population, and their gradual culture may have been. A proof is even afforded by the readiness of the different tribes belonging to the race to adopt the Hinduism imported among them, and, still further, by the manner in which they still retain the indigenous element, and scarcely ever allow its peculiar form to merge in the Indian. The contrary would have happened if these races had been wild, uncultivated savages, when Indian colonization first came in contact with them. When I speak here of Hindus, I of course only mean people speaking the Sanskrit language, and not the inhabitants of the continent of India generally. How far the one race came in contact with, and was, perhaps, driven out by the other, I do not now enter upon, as my purpose is only to show the different elements of civilization by which the Malay races were influenced.

"The second question, which alone relates to language, must, I conceive, be answered in the affirmative. In this respect the limits of Hindu influence have a wider range. Without mentioning the Tagali, which contains a tolerable number of Sanskrit words, with completely different meanings, there are to be found, even in the languages of Madagascar and the South Sea Islands, both words and

sounds belonging to the Sanskrit, and in such an elementary part of speech as the pronoun; and even the modes of change of sound, which may be looked upon as a good comparative test of the period of introduction, are different in the languages of the narrower Malay zone, in which, as in the Javanese, it is notorious that the influences of Hindu literature and language displayed themselves at a much later period. It becomes, therefore, a matter of great difficulty to explain this phenomenon, and to ascertain what reciprocal operation these two great families of languages have on one another. At the end of this essay I will return to the subject, as it is sufficient for me here to call attention to the influence of Sanskrit on the Malay languages, which appears to be distinct from the subsequently introduced mental cultivation and literature, and to belong to a much earlier period, and to different connections between the two races. I shall subsequently touch on the languages of the Negro race, but must make the preliminary remark now, that if in some of these tongues, as in the Papuan of New Guinea, for example, similarities with Sanskrit words are to be found, this does not at all prove any immediate connection between India and those islands, as such common words might have been introduced through the commerce of the Malays, just as we see now with Arabic terms.

"On seeking, therefore, to take a general view of the state of the civilization of the great Archipelago, we find the Malay populations to be hemmed in, as it were, between influences and characteristics which are strongly contrasted. On the same islands and island groups, which still contain races on the lowest level of civilization, or where at all events such tribes once existed, we find a very ancient state of culture, which had borne choice fruits, and which, derived from India, had become indigenous. The Malay races have appropriated this culture, in nearly all its parts, to themselves. Herein they may be perceived to be connected in race to the inhabitants of the South Sea Islands, who, compared to them, may be looked on as savages; and it is even doubtful whether their language is altogether strange to the Negro races. The South Sea Islanders have kept themselves distinct from those rude races by institutions peculiar to themselves, and by a language which in their present form is quite their own. The population of the Great Archipelago, which, according to our present

knowledge, cannot be traced to the continent of Asia, is found in places where all foreign influence must be left out of consideration, in a most rude and savage state, or on the lowest step of civilization. This is especially true if we regard only the Negro races and the South Sea Islanders, and exclude the Malay races, strictly so called, although no very sufficient ground presents itself for ascribing to these races a much higher station in civilization before Indian influences had operated upon them. We still find, even with the Battas of Sumatra, whose myths and religion display unmistakeable traces of Hindu influence, the barbarous custom of cannibalism on certain occasions. The Great Archipelago, however, extends itself along the whole coast-line of Asia, and connects itself with both its extremities, stopped only by Africa on one side, and America on the other. Its centre lies at a considerable distance, so far as navigation is concerned, from the nearest point of the continent of Asia. At different times, therefore, it has been acted upon from the three great focuses of the earliest awakening of the human mind amongst mankind — China, India, and the seat of the Semitic races. It has felt the different influences of all of them at proportionately remote periods. To its earlier progress India alone contributed anything of importance; Arabia nothing, even if we except Madagascar; and China just as little of importance, notwithstanding its early settlements."

While, as these extracts show, the philosophical mind of Humboldt was always turned toward the problem of the unity of language, and bent on the discovery of the few remaining threads that would hold the vast tissue of the Polynesian dialects together, Mr. Crawfurd approaches the subject from the very opposite point, as a careful observer, awake to all that is peculiar in each dialect, and anxious rather to distinguish than to combine. Nothing is more useful to the progress of scientific discovery than the cooperation of men following principles so antagonistic. They mutually check and correct one another. While Humboldt thought already of linking the whole Polynesian family with the Arian through the medium of Sanskrit, Mr. Crawfurd shows that the Polynesian dialects themselves have not yet been definitely traced to one common source. But the disparity of dialects which rivets Mr. Crawfurd's eye, dis-

appears in great part under the comprehensive grasp of a scholar like Humboldt. Their methods, though different, will tend in the end to elicit the fact, that languages apparently unconnected in grammar and dictionary, can yet be reclaimed and comprehended under one common name by the discovery of a few characteristic features, which it would be impossible to consider as the result of mere accident.

Mr. Crawfurd holds, 1st, that there is no foundation for the prevalent idea that, Negroes excepted, all the descriptions of men in the limits above described belong to the same race; on the contrary, there are several races.

2nd. He also contends that many of the nations belonging to the same race, for example, the Malays and Javanese, speak distinct languages.

3rd. He holds that the black race, the Austral-Negroes, or Negritoes, are not identical, and that their languages, like their races, are also distinct.

4th. He admits that the Polynesians speak one very largely diffused language, with dialectic differences, but maintains that it is quite distinct from Malay.

As to identity of words being an indication of relationship between languages, Mr. Crawfurd denies it. "In the Malay and Polynesian languages," he says, "well sounding foreign words very readily gain admission. Instead of words expressing simple ideas being excluded, I should, on the whole, owing to the familiar and frequent use of the ideas, consider them the most amenable to adoption of any class of words whatsoever. Accordingly, such words will be found to have supplanted native terms altogether, or to be used as familiar terms along with them. Thus, to give some examples in Malay: the most familiar words for the head, the shoulder, the face, a limb, a hair, a pile, brother, house, elephant, the day, to speak, to talk, are all Sanskrit.

"In Javanese, we have from the same Sanskrit: the head, the shoulders, the throat, the hand, the face, father, brother, son, daughter woman, house, buffalo, elephant, with synonymes for the dog, and, hog, the sun, the moon, the sea, and a mountain.

"In the language of Bali, the name for sun in most familiar use is

Sanskrit, and a word of the same language is the only one in use for the numeral ten.

"It is on the same principle that I account for the existence of a similar class of Malayan words in the Tagala* of the Philippines, although the whole number of Malayan words does not exceed one fiftieth part of the language.

"In the Maori or New Zealand, the words forehead, sky, great, stone, point, to drink, to die, are Malay or Javanese; yet of these two tongues there are not a hundred words in the whole language.

"As to the personal pronouns, which have often been referred to as evidence of a common tongue, in as far as concerns the language under examination, they are certainly the most interchangeable of words, and cannot possibly be received as evidence. Some of them; for example, are found in the Polynesian dialects, where, in a vocabulary of five thousand words, a hundred Malayan terms do not exist.

"The numerals must surely be considered as out of the category of early invented words, for they imply a very considerable social advancement, and seem to be just the class of words most likely to be adopted by any savages of tolerable natural capacity. The Australians are not savages of such capacity, and although with the opportunity of borrowing the Malayan numerals, they have not done so, and in their own languages count only as far as 'two.'"

All these principles thus laid down by Mr. Crawfurd, are, of course, liable to considerable limitation, according to the language and people which form the subject of our researches; yet, as a general thesis, it must no doubt be admitted that mere similarity of words does not prove the common origin of languages. It follows, on the other hand, that mere dissimilarity of words does not prove the absence of

* In a Tagala Dictionary of 16,482 words, published by Father Juan de Nouda, Mr. Crawfurd discovers not more than

Malay and Javanese words	399
Sanskrit	33
Arabic	7
Persian	2
Telinga	1
	442

an original connection of languages. As these points has been discussed before, we shall proceed at once to give what Mr. Crawfurd considers as the safest test of a common origin of languages. He says, "The words which appear to me most fit to test the unity of languages are those indispensable to their structure, which constitute, as it were, their framework, and without which they cannot be spoken or written. These are the prepositions, which represent the cases of language of complex structure, and the auxiliaries, which represent times and moods. If a sentence can be constructed by words of the same origin in two or more languages, such languages may be safely considered as sister-tongues, — to be, in fact, dialects, or to have sprung from the same root. In applying this test, it is not necessary that the sentence so constructed should be grammatical, or that the parties speaking sister-tongues should be intelligible to each other. The languages of the south of Europe can be written with words common to them all, derived from the Latin without the assistance of any of the foreign words which all of them contain. The common stock, therefore, from which they are derived is Latin, and they are sister-tongues. English can be written with great ease with words entirely Anglo-Saxon, and without any French words, although French forms a sixth part of the whole body of its words, but *no sentence can be constructed consisting of French words only.*"

So far as this is meant as an acknowledgment that grammatical elements are the only safe basis for a classification of languages, nothing could be said against it. But first of all, languages do borrow even prepositions and conjunctions. In Turkish, every preposition in the true sense of the word, I mean every preposition standing before the noun which it governs, is Persian, Turkish* prepositions being always placed after the noun. Many conjunctions in Turkish are of Persian and Arabic origin.† Secondly, sentences can be constructed in English, consisting of French, i. e. Latin, words only. If I say "avarice produces misery," every word is Romanic, but it does not follow that, therefore, English is a Romanic language. In fact, the single letter *s*, used as the exponent of the third person sin-

* Cf. Redhouse, Grammaire de la langue Ottomane, § 994.

† Cf. Redhouse, Grammaire, § 999. seq.

gular, is sufficient to stamp the language in which such a sentence can be framed as non-Romanic. Nothing, therefore, but grammatical forms can settle the relationship of languages definitely, and even grammatical forms have occasionally been transferred from one language into another. But in no instance has an entire grammatical system, a complete set of terminations of declension or conjugation, been appropriated by a foreign tongue, and where these terminations coincide as a whole, we may be sure that we have to deal with cognate idioms. Next to the evidence of grammatical terminations, come pronouns, then numerals; then conjunctions and prepositions; and, lastly, words expressive of the simplest ideas and the most common objects of every day's life. There are instances where even such words as father and mother, brother and sister, have been replaced by foreign appellations, or by words newly formed in members of the same family of languages. But, on the whole, owing to the familiar and frequent use of these words, people are unwilling to part with them and afraid to replace them by foreign terms not intelligible at first to the whole community. The Saxons learned to use many foreign words, yet their household words remained on the whole Saxon. So did their numerals without exception, so did their pronouns, and so did in the highest degree their grammatical terminations.

But although we cannot agree with the somewhat too general principles by which Mr. Crawfurd tests the relationship of languages, we shall give the results to which his method has led him with regard to the Polynesian languages.

"Applying this test to the Malayan languages, it will be found," Mr. Crawfurd maintains, "that a sentence of Malay can be constructed without the assistance of Javanese words, or of Javanese without the assistance of Malay words. Of course, either of these two languages can be written or spoken without the least difficulty, without a word of Sanskrit or Arabic. The Malay and Javanese, then, although a large proportion of their words be in common, are distinct languages, and as to their Sanskrit and Arabic element, they are extrinsic and unessential. When the test is applied to the Polynesian languages, we find an opposite result. A sentence in the Maori and Tahitian can be written in words common to both, and without the help of one word of the Malayan which they contain, just as a sen-

tence of Welsh or Irish can be constructed without the help of Latin, although of this language they contain at least as large a proportion of words as Maori or Tahitian do of Malayan. The Maori and Tahitian are therefore essentially the same language, and their Malayan ingredient is extrinsic."

The Malayan races, according to Mr. Crawfurd, have diffused themselves, and the civilization which they attained by self-derived culture, from two distinct and independent centres. "The Malay-speaking Malays from the rich table-lands of the interior of Sumatra, —Sumatra, which, from its physical gifts, and large proportion of coast line abutting on placid seas, would be at once seized on by the geographer as a focus of civilization. And the Javanese-speaking Malays from Java, an island not less richly endowed in physical advantages."

Into the question of the common origin of the language of the Malay, the inhabitants of the more eastern islands of the South Sea, the Negritoes, and Haraforas, we cannot enter at present, though we believe that Humboldt's work has laid open so many traces of relationship, that even after his theory with regard to a distant connection of the Malay with Sanskrit and the other Arian languages is dropped, much remains to encourage the comparative philologist to work that mine of philological research which the genius of Humboldt has opened, but not yet exhausted.

The formal coincidences between the Malay and Taï grammar here pointed out for the first time, furnish a link between Asia and Polynesia, which, even by itself, is strong enough to hold two of the mightiest chains of languages together; the Nomads of the sea, extending from the east coast of Africa to the west coast of America; the Nomads of the Continent swarming from the south-east to the north-west of Asia. But further researches will strengthen this link, and add new traces of their common origin, though we have hardly a right to expect many, considering that we have to deal with languages, in which grammatical elements, are, as it were, at the mercy of every speaker, in which roots are of the vaguest character, and can, by means of accents and determinate syllables, be made to express every conceivable shade of meaning — languages which had received no individual impress before their first separation, and have grown up

since under the guidance of but few logical or grammatical principles, so as to make us sometimes doubt whether we should call them works of art or products of nature, or mere conglomerates of an irrational chance. While in political languages, comparative philology has to establish a principle by which to account for coincidences such as *Asmi*, I am, of the Veda, and *Esmi*, I am, used by the Lithuanian peasant of the present day, a principle must be found in nomadic dialects to account for differences such as we find between Mandshû and Finnish, Chinese and Tibetan, the Taï and Malay languages. These differences must be explained by analogies to be derived from American, Indo-Chinese, or Siberian idioms, where we still meet with tribes who, after a short separation, have become unintelligible to one another, and where but few traces remain in their idioms to enable the philologist to discover the common basis whence all proceeded. Unless such principles can be established, all attempts to prove the common origin of nomadic languages will fail. To transfer the rules of Arian or Semitic philology to this vast field of linguistic research, would betray an utter ignorance of the nature of language; it would be, as it has been well expressed, like cutting stones with razors. To consider the few remaining coincidences between such idioms as the result of accident, would be a view incompatible with the philosophy of language, which allows indeed casual parallelisms between dialects no longer connected by any ties of relationship, but distinguishes carefully between these, the result of mere accident, and other congruences, which, though few in number and small in extent, could not, like the segments of a circle, coincide without the admission of a common centre whence all proceeded, and from which their various distances must be measured.

Eighth Section.

Tamulic Class.

§ 1. *Early Traces of the Tamulic Nishâdas.*

We now return through the valley of Asam to where the Brahmaputra joins his sister, the Gangâ. It is here, on the coast of Bengal that we meet with the first historical traces of the Tamulic languages.

Where the Gomati falls into the Brahmaputra, stood formerly the kingdom of Tripura. As Garuda, the bird of Vishnu, is praised as the devourer of the Kirâtas, Siva's triumph over Tripura is the continual theme of the worshippers of Siva. In either fable we may recognise the signs of Arian conquest over Nishâda races. In the north-west, the Nishâda had been driven into the deserts of Sugdh and Merwar as early as the times of the Veda, where the Sarasvati marks the "iron gate" between Âryas and Nishádas. In the south-east we see the cities of the Nishâda burnt by Siva; in the north-east the Kirâtas are eaten by the bird of Vishnu; and in the south Râvana is punished and destroyed by Râma, the hero of the Ramâyana. Now Ptolemy knew a royal city beyond the Ganges, and he gives its name as Trilinga or Triglyphon. The former name is clearly Sanskrit, and it is the same which the Brahmans gave to the Andhras, or the most northern branch of the Tamulians, on the east coast of the Dekhan: it is Trilinga, the modern Telugu. But such could not have been the name of these people, or of their capital before the Brahmanic conquest. Linga may have been Arian, or not, but tri (three) is certainly Arian alone; and if Trilinga was a Sanskrit translation of a Tamulian word, we should in its original form expect, instead of the Arian tri, the corresponding Telugu numeral, which is mo*da*i and mo*da*ga. Now we read in Pliny (H. N. vi. 21.), "Insula in Gange est magnæ amplitudinis gentem continens unam, Modogalingam nomine. Ultra siti sunt Modubæ (Mutiba, Ait. Brah.), Molindæ (Pulinda, Ait. Brah.), Uberæ (Savara Ait. Brah. or Sauvîra ?), cum oppido ejusdem nominis magnifico; Galmodroesi, Preti, Calissæ (Kalinga?), Sasuri, Passalæ, Colubæ (Kaulûbha, Lassen, ii. 206.), Orxulæ, Abali, Taluktæ. Rex horum. peditum L. M., equitum IV. M., elephantorum CCCC in armis habet. Validior deinde gens Andaræ (Andhra, Ait. Brah.), plurimis vicis, XXX. oppidis, quæ muris turribusque muniuntur," etc. Should not this one nation, inhabiting what is called a large island in the Ganges, and having the name of Modogalinga, be again Trilinga, or at least the people of the Trilingas, i. e. Telugus? There is a difficulty about the "insula." But whatever was meant by it, certain it is that, in Pliny's time, a national name, Modogalinga, was known near the mouth of the Ganges, and in the immediate neigh-

bourhood of the Andhra, or the Northern Telugus. The names of the neighbouring nations, also, such as Mutibas and Pulindas, are known in the Aitareya Brahmana as outcast nations on the frontiers of Âryâvarta, and as the cursed descendants of the sons of Visvâmitra.* There is another word, either Tamulian, or at least a Tamulian corruption of a Sanskrit original, which proves the presence of the Tamulians in the Dekhan as early as the time of Solomon. That the Ophir of the Bible is Abhîra or the country near the mouth of the Indus, is firmly established by the fact that some of the articles which Solomon received from Ophir are indigenous to India, and in some cases found in no other country, for instance, sandal-wood, algumîm, Sk. valgu; and that the names of these articles, which are foreign, or non-Semitic, can be explained by a reference to Sanskrit. Lassen's "Indian Antiquities" (i. 538) leaves no doubt on this point. Now sandal-wood is obtained on the coast of Malabar, and therefore points to the Dekhan. But the Hebrew name of peacocks, tukiim, is simply Malabar, where togei is the word for peacock. This is again derived or corrupted from the Sk. sikhin, but its occurrence in the book of Kings under its Tamulian garb, shows that at a very early period the eastern coast of the Dekhan belonged to the Tamulian Nishâdas. That the Brahmans had driven them back beyond the mouths of the Ganges and Lohita before the Christian era, is proved by the Sanskrit names of these localities at the time when they were collected by the Greeks, and it is highly significant that even the southernmost promontory of the Dekhan, Cape Comorin, was known to Ptolemy and the author

* These outcast nations are not fixed in their localities like the Arians. We find Pulindas where the Aravali mountains join the Pariyâtra, near Guzerate, and again, where the Vindhya bends toward Pataliputra, between the Keimur and Korair mountains we find Pulindas. Why should the Greeks not have heard their name near the mouths of the Ganges and the Lohita? We recognise Andhras and Trilingas to where the Arian Oriyas drove them from the coast. Why should the Triglypton of the Greeks, which is as near a translation of Trilinga as possible, be too far east for a Telugu kingdom in those early times? The other etymology of Trilinga, which Ellis gives, and Lassen adopts, seems much too Brahmanic, if Trilinga is an old national name. And that it was so, we cannot doubt; for Ptolemy knew it not only as Triglypton, but as Trilingon also. If, therefore, to repeat, Pliny knew a nation in the immediate neighbourhood of the Andhras by the name of Modogalinga, whatever he meant by "insula," it fixes the Telugu name and the Telugu language near the mouths of the Ganges and the Lohita at about the beginning of the Christian era.

of the Periplus, not by a Tamulic name, but as Κομάρια, ἄκρον καὶ πόλις; this Κομάρια being, as Prof. Wilson has shown, the Sânskrit name Kumârî, the Virgin, the wife of Siva.

§ 2. *Geographical Distribution of the Tamulic Nishâdas.*

In the Tamulic languages, therefore, we may recognise the most ancient dialect spoken in India; and spoken there long before the arrival of the Arians, which, however, cannot be placed after 1500 B. C. There is no reason to suppose that the peninsula south of the Vindhya mountains had not been occupied by these Nishâdas until they felt the pressure of the immigrating Arians in the north. Nishâdas were probably spread over the whole of India. They seem to have had kingdoms and capitals in the most favoured spots of the country, and the resistance they offered to the Arian gods shows that they could not have been without a certain amount of civilisation. This stratum of native population was broken by the Arians, absorbed in the centre, scattered towards west and east, and violently pressed together in the south. Everything agrees with this supposition. We find the Dekhan occupied entirely by aboriginal races, with only a small and late sprinkling of Brahmanic blood. Civilisation there is Brahmanic, and the native languages are full of Sanskrit vocables; but the grammar has resisted, and language has thus retained its independence. In the west there are traces of Nishâdas from the Sarasvati and Drishadvati down to the mouth of the Indus. Lassen's map, where the Nishâda races are marked with blue, exhibits the whole as clearly as possible. Where the Sarasvati disappears before it could join the Indus, we have in the earliest times traces of the Nishâdas; for the Sarasvati, the sacred frontier river of the sons of Manu, was fabled to disappear in the desert, that the Nishâdas might not see it. Along the Indus, Arian civilisation has made but little progress; and whatever was done there, belongs to the Vaidik times more than to the later periods of Indian history. In later times, the Ganges and its tributaries carried off with them toward the south-east the whole stream of Arian immigrants. When afterwards no longer the Sarasvati and Sindhu, but the Yamunâ became the frontier stream of Arian conquest, there again, on the south-western limits of the Gangetic system in the

valleys tributary to the Yamunâ and Gangâ, we find the seats of the Nishâdas in the impermeable fastnesses of the Dandaka forest. Even north of the Gangâ a Nishâda king, a vassal of the kings of Oude, is known in the Râmâyaṇa. Still later, when the Vindhya also was crossed by the Aryas, and the Narmadâ and Tapati stood in the place of the Gangâ and Yamunâ, on the Satpura mountains, or still more south, in the Raivata chain, we again find the retreating masses of the Nishâdas, together with Mlekhas, and also in the immediate neighbourhood of the Kolagiri, or the Kole mountains.

Under Greek names again, we may recognise the former more northern stations of these Tamulians. Where the Sarasvati is supposed to have joined the Indus in ancient times as the sixth river of the Penjab, south of Bhavalpur, the Sûdra population is marked by the name of Sydri in Ptolemy. Another well-known name of the lowest tribes was Kandâla. This also seems to have been originally an ethnic name, for the Κάνδαλοι were known to Ptolemy, together with the Bhills, south of the Narmadâ, that is to say, in the Satpura mountains—the very places where the Bhills, the Phylittæ of Ptolemy, have maintained themselves to the present day. The Paharias of Rajmahál and Bhagalpur, have kept their homes in the Parsvanâtha hills, formerly the seat of the Pundras, and to the present day, a Paharia of Rajmahál can converse with the Bhills and Gonds on the frontier of Berar (Lassen, i. 368.); thus proving that they are all the scattered fugitives of one and the same conquered army.

We may look on the watershed between the Ganges and the rivers of the Dekhan, as the broad line where Arian civilisation made front and halted. This Vindhya chain, however, is not to be regarded as a straight line running from Guzerate to Orissa, but rather as a winding mountain-enclosure, which beginning nearly at Delhi, runs towards the south, as the Aravalî chain — a screen against the sands of Merwar. Near Guzerate, it turns eastward, or rather is continued in this new direction by the Pariyâtra range, which connects the Aravalî with the Vindhya proper. The Vindhya then runs in a decided angle towards the north, and closes the basin of the Ganges near Pataliputra. These two lines, one drawn from Delhi to the Pariyâtra, the other from the Pariyâtra to Patna, enclose a territory which sends all its waters westward and N.-westward into the Ganges, or rather

into its right arm, the Yamunâ. For one southern stream only, the Sona, reaches the Gangetic basin after the junction of Ganges and Jumna. The waters which run from the southern declivities of this mountain range towards the Dekhan, are divided, nearly in the centre, by the Rikshavat (Uxentus). From the Rikshavta, two ranges run to the west, first, the Satpura range, which forms the southern shore of the Narmadâ, the northern being the Vindhya, and secondly the Raivatan mountains, which collect the southern feeders of the Tapati, its northern feeders being supplied by the southern side of the Satpura range. Toward the east, or rather north-east, the Rikshavat is continued by several mountain clusters, which stand like buttresses to support the back of the Vindhya. They are chiefly known as the Amarakan*t*aka, the Korair, the Bikeri, Malagiri, Gumagha*tt*a, Parsvanâtha or Rajmahal mountains. These stem off the waters from the Ganges, and send them into the Mahânadi and Godavarî.

The absence of Sanskrit names and Arian cities within the whole territory which has for its base a line not very distant from the bed of the Yamunâ, and which is enclosed by an arch formed by the Aravali, Pariyâtra, Vindhya and Rajmahal mountains, shows that the main army did not press strongly on this position. Detached forces penetrated beyond, but principally along the coasts, not in the centre of the country. The Vindhya mountains, through which the southern feeders of the Yamunâ and Ganges break their course, offered a safe retreat for races who disliked the contact of Arian society. All along the Vindhya, therefore, we find in ancient times from west to east, Sydri, Abhiri, Phyllittæ; Kandali, Molindæ, and Sabaræ; in modern times, Minas, Meras, Chitas, Ahirs, Koles, Bhills, Khonds, Gonds and Sourahs. Their strongholds are regions composed of lofty and rugged mountains, impenetrable forests, swampy woodlands and arid wastes, interspersed with extensive tracts of open and productive plains, but possessing a climate in many districts highly pestilential, like the Terais in the Subhimalayas. Even now but little is known of these tribes, and their languages have hardly been explored. But wherever attention has been paid to any dialects, they betray a decided relationship with Tamulic. Ellis was the first to point out that the idiom of the mountaineers of Rajmahal, close on the Ganges, if not of the same

radical derivation, abounds in terms common to Tamil and Telugu. The Rajmahali words collected by the Rev. M. Hurder, at Bhagalpur, leave no doubt as to the correctness of this supposition; and the Uraon words collected by Col. Ouseley, exhibit nearly the same dialect, though I do not know its proper habitat. It must be considerably south-east of Rajmahal, almost within the Gond territory. The language of the Gonds, which occupies so large a space comprised between the Vindhya range on the north, the eastern chain of Ghats, and a line connecting these, drawn from the mouth of the Godavary to the centre of the valley of the Narmadâ—was first suspected of a Tamulian origin in 1842, by M. Loesch, a German missionary. The same subject was alluded to by Mr. D. F. McLeod, in 1844, and the first list of words was published by Dr. Manger in the Journal of A. S. B., in March, 1847. I have not seen either of these articles, but the results to be obtained from them, were published in a highly interesting essay by Mr. W. Elliot November, 1847. The Gond dialects will henceforth be classed together with the Tamulic languages.

§ 3. *Separate Class of Munda Dialects.*

It has commonly been supposed that the chain of these uncultivated Tamulic dialects could be traced across the Dekhan without interruption from the Rikshavat mountains to Pariyâtra, the connecting links being furnished by the idioms of the Koles and Bhills. Of the original Bhill dialects no specimens have as yet been published, so far as I am aware; nay, it seems as if the Bhills had adopted the language of their conquerors to an extent obliterating all traces of their original speech. Some of the Kole dialects have been collected by Captain Haughton. But in the lists printed by Mr. Hodgson, I observe an agreement between Rajmahal, Uraon, and Gondi words, and, so far as words are concerned, I should say that the dialects spoken by the Rajmahal-Koles, and the Uraons, are of the same family as the Gond, and, therefore, of Tamulic origin. But this cannot be said of the Sinhbhum, Sontal, Bhumij, and Mundala Koles, though Mr. Hodgson inclines to believe that all these dialects belong to the same class. He says, "the affinities of these

tongues are very striking, so much so, that the five first (Sinhbhum, Sontal, Bhumij, Uraon, and Mundala Kole) may be safely denominated dialects of the great Kole language; and through the Uraon speech we trace without difficulty the further connection of the language of the Koles with that of the hill men of the Rajmahal and Bhaugalpur ranges. Nor are there wanting obvious links between the several tongues above enumerated and that of the Gonds." Here I must differ from Mr. Hodgson, although I confess the materials hardly suffice for arguing the point satisfactorily. But taking his own lists of words, I can see indeed many coincidences between Uraon, Rajmahali, and Gondi on one side, and Sinhbhum, Sontal, Bhumij, and Mundala words on the other, but none whatever between these two classes. I, therefore, suppose that in the dialects of the last four tribes, we have traces of a language spoken in India before the Tamulian conquest, and I feel confirmed in this supposition by finding that these dialects are the same as the Ho, on which we possess a most interesting memoir published by Lieutenant Tickell, in the Journal of the Asiatic Society of Bengal, 1840. The four Kole dialects and the Ho are spoken in the same locality with the other Kole dialects belonging to the Tamulic family. But the numerals, the pronouns, and the grammatical system (known of this dialect only), differ strongly from the Tamulic; though at the same time, they do not show any traces of relationship with either Arian, or Bhotiya, or Taï languages. The race by which these dialects are used may have merged into the Tamulic in places where both have been living together for some time. Both are, therefore, promiscuously called Koles. But historically as well as physiologically there is sufficient evidence to show that two different races, the Tamulic and an earlier race, came in contact in these regions, whither both fled before the approach of a new civilisation.

Traces of this earlier race, as distinct from the Tamulic Koles, have been found by Lieutenant Tickell from the jungles of Ramgurh (near Hazaribaugh) to the south and southward, along Moherbunj, Keonjur, Gangpur, down to the confines of Buna Nagpur. Here they are distinguished from the Gonds by the name of "Kirkee." Their colonies, as described by the Gonds, are insulated, semi-barbarous, and confined to the wildest parts of that country. The

country lying north and north-east of Gondwana, and west of Gangpur, and south of Surgujia, is in all probability inhabited by the main stock whence these small settlements have wandered The inhabitants of Chota Nagpur are also called Koles, but Lieutenant Tickell describes them as a totally distinct race, differing from the Hos not only in language, but in manners and origin. The Koles of Chota Nagpur are properly named Oraóus (the same as Hodgson's Uraons). They are of the same lineage as the Gonds and other uncivilised Tamulian races. The Uraons still remember their former habitation west of the Sone, and they ascribe their transmigration across that river towards the south-east to the inroads of Hindus from the vicinity of the Ganges. Now the Uraons found other people already in possession of the country into which they were migrating. These people, called themselves "Munda," which as an old ethnic name, I have adopted for the common appellation of the aboriginal Koles. Kole is too general a name, because it is applied promiscuously to uncivilised races, and has become the English term for porters (Coolee, or Kholee, or Kuli's) all over India. It is said that the Mundas and Uraons lived peaceably together until the Brahmans reached their country. The political and religious oppression exercised by the Brahmans, drove the Mundas from their country; a great portion traversing the hills and forests of Kœhang, passed out eastward into the open tract now called Singbhum and the Kolehan.

Here they found a people called Bhuians, with whom they shared the country. A race of Bengali Brahmans, called Sarawaks, who endeavoured to establish their supremacy on the Kolehan also, was driven back by the Hos and Bhuians in common. But as the Kolehan was lying in the route of hosts of pilgrims from Patna and Benares to Jaggernath, other adventurers tried to possess themselves of these fertile tracts of country. In this some Marwari Rajputs succeeded at last, and after the total discomfiture of the Bhuians, the Marwari Singbhunsis and the Hos divided the country, the Hos withdrawing from the rich open plains, now called Singbhum, into the country now called Hodesum or Kolehan. It is of these Mundas that Lieutenant Tickell has given so accurate an account. He maintains that they are related with the Mundas of Chutia Nagpur, although many

of these form part of the good-tempered, but ugly-figured Dhangurs seen in Calcutta. The Mundas of Hodesum, on the contrary, have preserved their race in greater purity, and are described as men eminently handsome, "with figures like the Apollo Belvedere." The Mundas of Hodesum shave the hair off the forehead, and wear it tied behind, a custom which may account for their name "Munda," *i. e.* one who shaves his head. The other Mundas wear their locks dishevelled, or clubbed at the top of the head, transfixed with a long pin or comb, by which they are at once distinguished. For further distinguishing marks between the Hos and Uraons, or as they are also called, the Lurka-Koles and Koles, I must refer to the two first portions of Lieutenant Tickell's Memoir. My own reasons for distinguishing between the Ho language and the Tamulian dialects are principally derived from grammatical sources. The dictionaries of the Munda and Tamulian languages differ more than could be the case with cognate dialects. But it is again from the numerals and pronouns only that we can derive a full conviction on this point. Lastly, we have declension and conjugation, which, as we may trust Lieutenant Tickell's account, are decisive as to the non-Tamulic character of these dialects.

§ 4. *Languages belonging to the Tamulic Branch.*

This broken line of Tamulic outposts once crossed, we are in the midst of the Tamulic division of languages. The encroachment of Arian Dialects, as the Mahratti and Konkani on the western, and the Oriya on the eastern coast, show the course which Arian civilisation, hemmed in in the middle by the Vindhya range, took on each side of the Dekhan. The Mahratta conquest, which belongs to a much later period, secured to the dominion of Arian speech a large portion of country east of the Ghats, and surrounded by the Rikshavat, Satpura, and Raivata mountains. After this, we have, on the coast and in the interior of the Dekhan, the following Tamulic dialects:—First, Tuluva; then Malayalam, on the Malabar coast as far as Cape Comorin; then, in the whole tract from the western Ghats to the eastern coast, Tamil; and, after this, until we reach again the territory of the Gond, the Telugu. The central portion,

between the Tuluva in the west and the Telugu in the east, belongs to the Karnata or Canarese language. Besides these large lingual provinces, smaller districts must be assigned to several popular dialects. In the Nilghiri hills, for instance, we find the Todas, whose language becomes the more interesting the less it has been affected by any influence of Sanskrit grammar and literature. In the Tulu country the Koragas and Malekudias speak similar languages, as has been stated by Weigle in a very interesting article on the Canarese language, published in the Journal of the German Oriental Society. Other dialects of the same kind are mentioned by Professor Lassen (Indian Antiquities, i. 364.).

The geographical position of these languages and dialects, however, is so well known, and has been so frequently discussed in the works of Ellis, Wilkes, Wilson, and Lassen, that little of importance could here be added.

§ 5. *Character of the Tamulic Class of Languages.*

Nor is it necessary to prove that all these languages and dialects are held together by the ties of a close lingual relationship, for this is one of the few facts in comparative philology, which, after it had once been stated, has never been called into question. Only one remark remains to be made on this point, and it is more of an historical than philological nature. It has been pointed out once before, that we have no right to suppose the Tamulic Nishâdas to have been mere barbarians when they first came in conflict with their Arian conquerors; that, on the contrary, the destruction of their cities, and even the character of their leaders as represented, in the most hostile spirit, in Sanskrit poetry*, give evidence of a former civilisation crushed and scattered by the superior power of the Âryas. This view is confirmed by the close relationship which unites these numerous languages spoken over a surface as large as that of the Romanic dialects in Europe. There is a certain kind of similarity between languages, which can only be explained on the supposition

* Râvana, the Râkshasa king of Lanka, conquered by Râma in the Dekhan, is a god worshipped by Sub-Himalayan tribes, as for instance, the Hayús. J. A. S. B. 1840, p. 611

that they had once a common historical centre. Thus, even if we had no knowledge of the former existence of Latin as a political language, the resemblance of the Romanic dialects would force us to admit a political concentration of language previous to the time when this fixed and settled speech became broken up into various dialects. This resemblance between secondary dialects is a different one from that which may be observed between primary dialects, such as precede the formation of every political language. These primary dialects are earlier than the κοινή, just as mountain streams are earlier than rivers; the secondary dialects, on the contrary, are later, just as channels are later than lakes. Among savage tribes, where these primary dialects have never been called together into a literary system, we find, as in America, Africa, and Cochin-China, that there exists so perplexing a variety of idioms, that the inhabitants of neighbouring villages are unintelligible to one another; and, in the absence of all checks on the caprices and peculiarities of individuals, old forms are changed and new forms introduced by every individual with such recklessness as to obscure for ever the traces of a primitive community of speech. In the history of the Arian family we can distinguish between several lingual centralisations. After one dialect has attracted or absorbed the floating elements of other popular dialects, and been raised to the dignity of a classical language, we see it again diverge into new branches. Latin first absorbs all the idioms of Italy, and after it has become the language of the then civilised world, it is broken up in turn into many dialects. If this political centralisation of Italy had not intervened, and if no Roman empire had brought the provinces of Italy under one common sway, the dialects of the Umbrians in the north of Italy would have developed themselves and become so different from that of the Sabines in Lower Italy as to appear to us a totally different language, differing from the Oscan at least as much as Greek from Slavonic. But these two dialects, the Oscan and Umbrian, were themselves political and literary languages, not to be compared with the unsettled idioms of savage tribes such as we find in America. If, then, we imagine a state of things where the different provinces, nay the towns and villages in the separate valleys of Italy, had each retained its lingual independence, each continuing to use its local dialect for

centuries, without any political intercourse, or common literature, political, religious, or legal, we should then find, as we do in South America, almost as many distinct languages as there are settlements. Kircher fixes the number of languages known to be spoken in South America toward the end of the seventeenth century, at five hundred; and in most cases the people who speak such idioms are said to be unintelligible to their nearest neighbours. Here, therefore, in America, we should say, that the immense diversity of dialects shows the absence of a previous political centralisation. Now, on exactly the same ground, it follows that in the Dekhan the great similarity between the different Tamulic dialects can only be the result of a former period in the history of the Tamulian speech, during which its character became fixed, grammatically and etymologically. Such a process we can only ascribe to the influence of a more comprehensive civilisation, and a more extended political and literary intercourse than is generally ascribed to the aboriginal inhabitants of India. The Tamulic dialects agree not only in roots, not only in pronouns and numerals, but in derivative words which must have been known to all before they began to diverge and grow into new dialects. Perhaps it will be possible to fix on one of these dialects as the eldest of the Tamulic sisters, and derive from it some of these words which are common to all. But even then our conclusion would be the same; for the adoption of words from one dialect into another necessitates equally the admission of a political and literary intercourse, which can only take place during a period of advancing civilisation.

Another reason for supposing the Tamulic languages considerably advanced in their literary capabilities before their struggle with the Sanskrit began, may be discovered in their successful resistance against the introduction of Sanskrit elements into their grammar Although the dictionary of the Tamulic languages is as full of Sanskrit words as English is of Norman, yet the Tamulians did not give up their grammatical independence. And even the words which were adopted from Sanskrit had to submit to the genius of these dialects. With the exception of those adopted ready made, and simply transferred from Sanskrit, as Latin expressions are in English, the majority of Sanskrit terms in the Tamulic dialects has been

changed to such an extent, that it is difficult sometimes to discover their foreign origin. Words simply taken from Sanskrit are, according to Ellis, called "Tatsama," i. e. equal to Sanskrit. For instance, sampadu in Telugu is the Sanskrit sampad (fortune).

Appa in Telugu is the Sanskrit âpah (water).
Payasu in Telugu is the Sanskrit payas (milk).

Words adopted from Sanskrit with considerable phonetic changes are called "Tadbhava," i. e. produced from Sanskrit. Some of the changes which these words have undergone must be ascribed to the spoken or vulgar Sanskrit, for they depend on the same rules by which Sanskrit words are modified in the Prakrit dialects. These, the spoken or vulgar dialects of the Sanskrit, would be the most natural channels through which Sanskrit words could have reached the Tamulians. And as in French we find frequently the same Latin word under two different forms, of which the one (as for instance "rédemption") might be called a tatsama, the other (as for instance "rançon") tadbhava, instances occur in the Tamulic languages where the same Sanskrit word has been adopted under two different forms. Parva in Sanskrit means a knot or joint, and, with particular reference to the moon, it means the day of the full and new moon. As these were festival days, pabba and habba in Canarese* mean a "festival." But in the learned language of the Brahmans parvan came also to signify a chapter or book, and in this sense it is used in Canarese parva, section of a book. Instances where Tadbhava words in Telugu seem to have passed through Prakrit channels are the following:—

Sanskrit.	*Prakrit.*†	*Telugu.*
brahma	bamha (Vararuki, v. 47.)	bomma (Brahma).
brâhmanas	bambhadu (Abhîra)	bapadu (a Brahman).

* Cf. Weigle, Journal of the German Oriental Society, II. 265.

† The Prâkrit forms are given on the authority of Ellis, in his introduction to Campbell's Teloogoo grammar. Ellis must have availed himself, however, of other sources besides Vararuki. Where his forms agree with Vararuki I have added a reference to the excellent edition of this grammarian by my friend Mr. Cowell, at Oxford. Where they differ, or where they do not occur at all in Vararuki, Ellis may have followed Hemakandra, or other authorities, as he was too accurate a scholar to have formed them merely on general analogy.

Sanskrit.	*Prakrit.*	*Telugu.*
dvîpas	divo (Mahârâshṭri)	divi (island).
yasas	*g*aso (Varar, II. 31.)	asamu (glory).
prati*gn*âtam	pa*dinn*âdam (*S*auraseni)	pannidama (promise).
nedish*th*am	nedistam (Mâgadhi)	nestamu (friendship).
râmâ	lâmâ (*ibid.*)	lema (woman).
trilingas	tilingo (Varar, vi. 56.)	telugu *or* tenugu.
svar*n*am	sannam (Paisâ*k*i)	sonna (gold).
suvar*n*am	panno (Kulica-pais*k*i)	ponnu (gold).

It will appear, even from this short list, that some phonetic changes, generally ascribed to the influence of the Telugu, can be traced back to Prakritic corruptions, but that, at the same time, the Telugu went beyond the limits of the Prakrit.

Sanskrit words form so large a portion of the Tamulic dictionaries, that they are no longer considered as foreign words. Foreign words, according to Telugu grammarians, are called "Anyadesîya," i. e. of another country; and the Appakavîyam explains their origin in the following manner:—"The natives of Andhra (i. e. Telugus) having resided in various countries using Telugu terms conjointly with those of other countries, these have become Andhra terms of foreign origin."

What remains, after subtracting all these extraneous ingredients, is called Desya, i.e. native words. Thus it is said, in a stanza of the Adharvana Vyâkarana with regard to Telugu:—"All the words which are in use among the several races who are aborigines of the country of Andhra' which are perfectly clear and free from all obscurity; these shine forth to the world as the pure native speech of Andhra (*s*uddha . andhra . desyam)." There is only one more distinction made, between what are called native and vulgar words. The latter are termed grâmya, i.e. belonging to villages, and explained by the Appakavîyam as follows:—"Such Telugu words as are commonly used by rustic folk are known as grâmyam; these lose some of their regular letters, and are not found in poetry, unless, as in abusive language, the use of them cannot be avoided."

If we now look at the grammar of the Tamulic languages, we shall find at once that we have before us a system of declension and

conjugation much more developed than in the Bhotiya dialects. The forms are more settled according to general grammatical categories; and although the cases, as in all Turanian languages, are formed by postpositions and are, therefore, liable to great variety, yet there exists a formal distinction between the casus rectus and obliquus. This base of the casus obliquus and the terminations of the cases, when brought in contact, are liable to phonetic changes similar to the changes of Sandhi in Sanskrit and other Arian languages, and both coalesce into one grammatical whole. This gives rise, as in some of the more advanced members of the Finnic and Tataric branches, to some real grammatical cases, which become technical, and are used in preference to mere compounds: particularly in the modern and spoken dialects, where the number of independent postpositions expressive of case is much smaller than in the ancient languages. A still greater advance toward grammatical forms is made in the conjugation. Here we find moods and tenses formed by the addition of letters and syllables which by themselves have no more meaning than any termination in Greek or Latin. The persons are expressed by pronominal terminations, and these terminations vary according to the tenses, in the same manner as in Greek and Latin. A grammar like this could only be the grammar of a civilised people. It shows signs of wear and tear, and in what it has retained as well as in what it has given up, we can discern the working of a spirit of wise economy.

Ninth Section.

Comparison of the Tamulic and Ugric Languages.

If, therefore, we look for analogies to the Tamulic grammar in other branches of the Turanian family we should naturally take those which, like the Tamulic, have reached a certain degree of grammatical perfection. This grammatical perfection, as was stated before, consists first in the production of those formal elements which are wanting altogether in family languages, such as Chinese; and which are extremely scarce as yet in the lower Nomad languages, as in the Tungusic or in some of the Gangetic, the Lohitic,

and Taï class. Secondly, in the reduction of these formal elements to certain limits; in the introduction of distinct grammatical categories; and in the suppression of many artifices which at first suggest themselves as means of expressing all the minutiæ of the most complex relations, but which, in the progress of the intellect, are found not only useless, but cumbersome, for the practical purposes of speech. We should, therefore, naturally look to the Tataric or Ugric, and not to the Tungusic or Mongolic branches, if we expected to find a similarity between the grammar of the Tamulic and that of any other branch of the Turanian family.

But there are other indications, which lead us in the same direction.

Though it is generally admitted that most members of the Turanian family separated before their numerals had become fixed and unchangeable, and although, at first sight, we discover hardly any traces of similarity in the numerals of languages so nearly allied as Turkish and Hungarian, it is the duty of the comparative philologist to search for points where any two branches of this prolific family may have preserved faint indications of their former unity. As the Finns are the most northern, and the Tamulians the most southern colonies of this Asiatic race, both were probably the last to separate from their common stock. Both, also, have been removed for many centuries from contact with the ever floating and changing population of Central Asia, and thus may each have preserved the impress of the language as it was spoken by the remaining nucleus of the Turanians long after the separation of the Taï, Malay, and Bhotîya branches in the South, and of the Tungusic, Mongolic, and Tataric branches in the North had taken place.

Now, if we compare the Ugric and Tamulic Numerals, they certainly do not seem to offer much encouragement. The words for one, two, and three, are evidently derived from more than one root in the Tamulic, as well as in the Ural-Altaic languages. These three first Numerals, however, are liable to change and fluctuation in languages the common origin of which admits of no doubt. They are, so to say, the most concrete Numerals, expressive of more than abstract quantity, and therefore capable of being rendered in various manners. Thus one has two roots in most European languages;

Sk. ekas and prathamas; the former expressing singleness, the latter priority. "Two," also, can be expressed by duo and ambo, by pair, couple, twin, and the like. One, two, three, are words, and not only numerals; they are declinable, therefore, in languages where, as for instance in Latin, the other numerals are so no longer. This shows their vitality and concreteness, or, if I may so say, their uninterrupted self-consciousness. Now, as we have frequently seen before, words which continue to be understood by the genius of a language are more liable to organic change and natural variation than others whose sound and meaning must simply be taken for granted. It is possible, therefore, that the three first numerals may differ, owing to that power of renovation and reproduction inherent in Turanian languages, while the rest may yet have been preserved, or at least have been exposed only to that influence of phonetic corruption to which such mummified words are most exposed.

But although it would be in vain to attempt to re-establish the original root from which all the names for "one" in the Ugric and the Tamulic languages could be derived, we need not shut our eyes to some cases where one or the other base for one, two and three, occurs north and south of the Himalaya.

The most general base for one in the Ural-Altaic languages is AKAT, which reminds us forcibly of the Hebrew ekhad, the Pehlevi achad, and even the Sanskrit ekas. Professor Schott traces this base in the Lapponic akt and akta, the Teheremiss iktä; in the Finnish yht and yksi, changed by the Esthonians into üts. In the Ostiakian there remains but öt, from which the Syrianian ötik may be derived. Other Ostiakian forms are it and i. The Tcheremissians have, besides the full forms iktä, and iktät, a shorter form ik, and the same abbreviation has taken place in the ök of the Syrianes, and the äk of the Voguls. The egy of the Magyars, and the väike of the Mordvines require no explanation, the addition of an initial v being of frequent occurrence; nor can there be any doubt that väi and vä, which equally occur in the dialect of the Mordvines, are but phonetical varieties of the same type. Instead of an additional v, which we find in the Mordvinian, the Mongolian adds an initial n, and forms nige, one. This nige may be said to stand for an original jige, as several words in the Finnic languages show an interchange

of j and n at the beginning of words. In the Tungusic languages the form jeg does really exist, and is used to form the word for nine, as "ten minus one."

Now, in the Tamulic class we find at least the Telugu oka, which might be compared. But, going back to the most ancient representative of Turanian speech, we can point to the Gyami iku, the Chinese 'i and yut. The Mongolic forms in n (nige) find analogies in the Taï nüng and lüng; and in numerous members of the Bhotîya family the combination of guttural and dental may be traced as having, in various combinations, the power of one. I only mention the Nága akhet, and khatu, the Kuki katka, the Miri ako, as types from which many more of these Gangetic and Lohitic numerals can be derived. That all can not, is hardly an objection, if we consider that the Turkish also shows in its bir (one) a base independent of the old AKAT; and that a third radical for one must be admitted to exist in the Tungusic um, which explains the Manju emu, and several cognate expressions in Mongolic and Tcheremissian, where on, in, and en occur with the general meaning of unity or separation. This on forms again a chief element in the Tamulic names for one.

Some of the changes by which AKAT is reduced to i may seem violent, but they are so not in theory, but in reality. If we find that languages so closely connected as Mordvinian and Tcheremissian allow themselves forms like iktät, iktä, ik, väike and vä, and that even in the same language such variants as öt, i, and ja occur, all that we can do is to state the fact in order to show that the Finnic yksi and the Hungarian egy need not be considered as words different in their origin. Besides, although the rules affecting the interchange of letters have not yet been brought to that degree of completeness and certainty which in the Arian languages makes it easy to prove with full evidence the common origin of such words as Sanskrit AHAM and English I, yet general analogies have here been discovered, and in following Professor Schott through his admirable analysis of the Turanian Numerals we are never left without a precedent for the changes which he wishes us to admit.

The base which in a former paragraph was obtained as the most likely source of all Bhotîya words for two, NYA, seems at first to stand without any corresponding forms in the Ural-Altaic languages.

We shall find, however, the most luculent proofs that in the earliest state of the Ural-Altaic languages NYA was the etymon of "two," and that it was supplanted by a secondary form (AKAT, preceded by a guttural), in a manner that reminds us of the relation between Sanskrit "tur" in turya, the third, and *k*atur, four. This new base for two K + AKAT, is liable to the same modifications as AKAT, and hence it is sufficient to point out the correspondence between Finnish yksi, one, and kaksi, two.

Esthonïan üts, one, and kats, two.

Lapponian akt, one, and kvekt, two.

Lapponian oft, one, and guoft, two, Mordvin, kavto.

Vogulian ök, one, and Syrian. kik, two.

Tcherem. iktät, one, and koktat, two.

Ostiak. öt, one, kât, two, Vogulian, kit, Magyar ket.

The Turkish also, which has simply iki, for two, shows traces of an original initial guttural, which, as in many other words, was dropped in the progress of this language. The Turkish word for twenty, therefore, is not only igirmi, but yigirmi; and yigir being afterwards contracted into jir and sir, explains the Tchuwashian sirim, and Yakute sürbä, twenty.

These forms have no analogies south of the Himâlaya. The only approach to the Tamulic radical for two, which, in contra-distinction of on, the term for one, seems to have been er, may be discovered in Mongolic and Tungusic dialects. The Mongolic has the initial k, and it forms its words for two, as kuyar, and contracts it into kur, in kur-in, twenty. This kur exists in Tungusic as jur; in Mandshu as jue, 2. In the Mandshu or-in, twenty, the initial k has been lost altogether, as before in the Turkish igir-mi. An inter-comparison, however, of the Mongolic and Ugric words for two shows that the characteristic and significative power lies in this k, while yar, in Mongolic, and kta, in the Tchudic numerals, are secondary elements. This is still further confirmed by a reference to their terms for twenty, when, as in Syrianian ky-f, Mordvinian ko-ms, Vogulian ku-s, Ostiakian chu-s, and Hungarian hu-sz, the simple guttural expresses the value of two. In Tcheremissian kok-lu, the full word for two has been employed; and the same applies to the Tungusic jur-men, the Mongolic chur-in, and the Turkish yigir-mi.

The words for three which had preserved so many traces of a common origin in the Chinese and Bhotîya languages allow of hardly any inter-comparison, when we look to the Tamulic and Ural-Altaic branches. In the latter, the primitive base of three might be represented as KR, with a tendency to add a final labial b or m. With this base we can explain the Mongolic gur-b-an, the Magyar har-om and charm, the Vogulian kor-om, and the Ostiakian kol-ym. Again, the Lapponian, Esthonian, and Finnish kolm. The Syrianian kuyim leads naturally to the Tcheremissian kum. Professor Schott connects Tataric forms like ol-tuf, thirty, with the Ugric kól, appealing to the frequent loss of an initial guttural in Tataric. The Tungusic el-an also would thus be accounted for. The final l, which corresponds to an r, and which in Ostiakian is represented by d (chudem) and dl (kodlem and cholym), may become a palatal sound; because l, taking a mouillé pronunciation, has the same influence on a preceding t as i or j in "nation," and in this manner ol or odl (originally kodl or kor) may emerge again as the Tataric uch and üts. Thus the Tungusic el-an, three, and got-in, thirty, would descend from the same root, as well as the Mongolic gur-ban, three, and guch-in, thirty. Guch would explain the Tataric uch, three; and Tataric ol-tuz, thirty, would receive its solution from the Tungusic el-an, three.

Although we have seen, before, that an initial k, before it is lost altogether, may take the sound of ch, j, sh, and s, and although the Tcheremissian kum, three, has been traced back to KR-M, it would hardly be possible to take our stand on these secondary forms, and to compare them with the Bhotîya base, SAM. The Tamulic words also for "three" must be left unexplained, in the present state of our knowledge, as the phonetic changes which are sanctioned by these languages have not hitherto been explored with sufficient accuracy.

We must now compare the numerals from four to seven, which alone can be considered as the common property of the Ugric and Turanic races. Before their first separation these races did not count beyond seven; and it is, therefore, one of the most characteristic features of the two classes of the Turanian family, that their words for eight and nine are compounds, expressing 10—2, and 10—1, like

the Latin duodeviginti and undeviginti. Some tribes of the Bodo never count beyond seven at the present day.*

The simplest form for "four" in the northern division of the Turanian family is found in the Tcheremissian nil. The base from which all other words for "four" were derived may, indeed, be represented by NIL or NAL. This explains the Mordvinian nile, and nilen, the Vogulian nila, and Ostiakian niïl. The final *l* of nil was liable to a mouillé pronunciation, which is naturally expressed by the palatal semivowel *j*. This explains the Finnish neljä, the Lapponian nielj, the Syrianian njolj. Now, we saw before that a final *l*, particularly one that is liable to this palatal softening, is interchangeable with dl and d (as kodlem, chudem, and kolym); and this must account for the Ostiakian njedla, and njeda. The Hungarian negy is pronounced nedj, and this, therefore, merely a phonetic variety of njedl.

The coincidences between these and the Tamulic words for "four" need no explanation. Tamil, Malabar, Gond, and Tuluva, have simply the same word, nalu; and the Canarese nalku and Telugu nalugu are less violent deviations than the Hungarian negy.

Professor Schott goes even beyond this, and considers the Mongolic, Tungusic, and Tataric words for four as derived from the same radical. Supposing this radical to have been nalk, he allows a transition of n into d (as in Sanskrit navan, Lithuanian devyni). He then explains the Tungusic düg-ün (Mandshu, duin), four, as a variety of dülg-ün; and, by substituting different final letters, he arrives even at the Turkish dürt, four, and the Mongolic dürb-en. The transition of a final lj into the palatal ch being established before, he likewise explains the Mongolic düch in düch-in, forty, as analogous with Turkish uch, three, instead of 'ulj. These combinations must rest on the authority of one who is, no doubt, better acquainted with the possible changes of Turanian words than any scholar in Europe.

"Five," if reduced to its radical elements in the Northern or Ural-Altaic division, is VIT. This coincides with the Lapponian vit; and the Syrianian vitj, Mordvinian väte, Ostiakian vet, are easily

* Journal of the Asiatic Society of Bengal, 1849, p. 720.

traced to the same source. The loss of an initial v requires no explanation in Arian or Turanian dialects. Hence Hungarian öt, Vogulian ät, may be reconciled with the same root. A transition of t into s also has occurred more than once, and is confirmed here by the Finnish viisi, Esthonian wiis, and Tcheremissian vis. As in the mouth of a Basque, vivere is bibere, the Turkish besh also may enter into the same category. A Turkish sh is represented in Tchuvashian by l; hence pil-ik also has probably passed through the forms of vit, bit, vis, and besh.

In the Tamulic class I consider the Canarese and Telugu ayidu as mere amplifications of ed, a form not far distant of the Ostiakian vet and uet. The Tuluva ayinu, Tamil anju, Malabar inthu do not differ so much as to warrant the admission of a different radical.

"Six" was expressed, according to Professor Schott, by a modification of "three." Analogies exist in the Japan numerals mitsu, three, and mutsu, six; and, again, fitotsu, one, futatsu, two; jotsu, four, and jatsu, eight. Now, as the radical of three was KR or KL, changeable into KD, KDl, and KDj, Professor Schott maintains that this was raised to six by the addition of a final t, which t absorbs, in most cases, the final semivowel L or R, of the radical KR. In this manner he derives Ostiakian kut, Vogulian and Lappon. kot, Tcheremissian kut, Mordvinian koto, from a presupposed kurt or kutt, and by a transition of this final t into s, he accounts for Finnish kuusi, and Esthonian kuus. More difficult is the Turkish alty. As, however, in üch, three, the Turkish alone had sacrificed the initial k, we are justified in allowing the same process in what is only a modification of the radical three. We should then arrive at AR or AL, and the additional t of the six would give us the Turkish alty. If this last process is admitted, it need hardly be pointed out that an opening is gained for the Tamulic forms, which all point to AR as their common source.

"Seven," in its most abstract form, might be rendered by SAT. With this the Vogulian sat is identical; the Yakute settä nearly so; and the assibilation of the final t would account for Mordvinian and Syrianian sis-im, Esthonian seitse, Finnish seitse-mä. That a final s may be pronounced like a palatal, we saw before, and by this change we arrive at the Tchuvashian sichche, but we require the

same admission for an initial s, in order to explain the Lapponian chech. The initial letter alone has become palatal in the Turkish yedi, and in the Hungarian there remains but an initial h in het, seven.

Allowing the total loss of this h, we may compare the Tamil ezhu, and Telugu edu, of which elu in Canarese and Malabar, and al in Tuluva, are natural varieties.

The admission of SAT as a radical for seven, does not exclude the possibility that this SAT may be itself but a secondary form. For, although SAT suffices to explain most of the Turanian numerals, it does not explain such forms as the Ostiakian sabet (tabet, tlabet); and Professor Schott points out that, as in the Arian family septem has taken a secondary form set, which would suffice as the radical of French sept (pronounced set) Italian sette, Spanish siete, SAT also may be but a secondary radical as compared with SABAT. This would be a most extraordinary discovery, for it would actually restore the word for seven to so primitive a state, that not only the Turanian, but the Arian and Semitic languages might, in this case, be traced back to the very cradle of human speech.

Eight in Ugric is expressed by 10—2; nine by 10—1. The Syrianian kökjaamys, 8, is derived, according to Sjögren, from kök, 2, and jaamys, the elative of jaam. It means two taken out of ten. Although jaam, 10, in Syrianian is now represented by the (Russian?) das, it has been preserved in the Ostiakian jon.* Okmys, 9, according to Castrén, is derived from ötik and kym (10). The elative of kym would be kymys, which, together with ötik, is contracted into ökmys. In the same manner Sjögren derives the Finnish kahdeksan, 8, and yhde-ksan, 9, from kahde, 2, and yhde, 1, followed by ksan, which again is explained as the Ablative in san, of kym, 10.† I do not hesitate, therefore, to propose the same explanation for the Tamulic words for 8 and 9.

* Another Finnic scholar, Dr. Europæus, derives kökjaamys from kjam, a variety of the modern kämen or kjemen, 10; kämmen, in Finnic, meaning "hand." See Schott, p. 27.

† Professor Schott's derivation will be given hereafter. Dr. Europæus divides kah-deksan, yh-deksan, and endeavours to establish deksan as one of the most primitive words for "finger" and ten.

Two in Canarese is er|adu; ten hat-tu; eight entu.
Two in Tamil is ir|andu; ten pat-ta; eight etu.
One in Canarese is on|du; ten hat-tu; nine ombhattu.
One in Malabar is on|du; ten pat-thu; nine on-pathu.

The euphonic laws of the Tamulic languages have been too little explored to enable us to explain the contractions which have taken place in these compounds. But that they are compounds, and compounds formed on the same principles as those in Ugric, is palpable. Even if the elisions are without analogy, it would still be possible to go back for an explanation of these words to an earlier state of language, in which one and two were ôn and ar, and in which ten was tu instead of hat-tu, pat-tu, ba-da, &c. Indeed, I believe that wherever 8 and 9 have an identical element in their names, and where this element has any similarity with the names of ten, we may safely apply the same principle of formation which Sjögren and Castrén have established for the Ugric. In Mandshu, for instance, we find juan for 10, the same root we met before in Ugric. Now, juc in Mandshu is 2, and jakon is 8; emu is 1, and onyan is 9.

Humboldt discovered a similar process for expressing eight and nine in the Malay languages.

Professor Schott has treated this question in the most comprehensive manner in an Essay "On the Numerals in the Tschudic Class of Languages." I received one copy of it in time to avail myself of his suggestions while my own Essay was partly in print; and I subjoin the following abstract, containing all the evidences that can be brought to bear on this interesting feature of the Numerals of the Turanian family.

The first root for Ten, in the Tchudic languages, is T-S, or D-S. It occurs in the Syrianian DAS, 10; SIZIM-DAS, 70; KÖK-JAMYS-DAS, 80; OKMYS-DAS, 90; and in the Hungarian TIZ, 10. The same root, only contracted, appears in the Hungarian HAR-MIN-CZ, 30, instead of HARMIN-TIZ; and in HU-SZ, instead of HU-TIZ, 20. The Ostiakian CHUS, 20, Voguliian HU-S, and Syrianian KY-S, 20, are too like the Hungarian HU-SZ to admit of a different etymology.

The Turks used the same root, in "thirty,' which is OL-TUZ, and OTUZ; in Yakut OTUT; in Tchuvash VU-TUR.

The Hungarian NYOL-CZ, 8, and KILEN-CZ, show CZ = TIZ as the root for ten. NYOL was originally a name of "two;" but the root NYA, well known in Chinese and Bhotîya dialects, as the exponent of two, was used by other Turanian tribes as a Dual to express four. Thus it became fixed as "four" in the Altaic (and Tamulic) languages, while as "two" it was replaced by new words.

In the Ostiakian dialects, for instance, "four" is expressed by NJETLA, NJEDLA, NJETA, NJEDA, NJET, and NJEL.

Eight is expressed by NJIGEDLA-CH, NIDA, NIT, and NJIL.

In NJIGEDLA-CH, the CH must be taken as the exponent of ten, probably an abbreviation of the Finnish ksan, used for the same purpose. In the other forms this final ch has been lost, as its etymological importance ceased to be felt.

Prof. Schott admits the possibility that the two roots for ten, T-S, and KSAN, were originally identical. He traces ksan as ten in

Finnish,	kahde-ksan, 8,	and yhde-ksan, 9.
Mordvinian,	kav-kso, 8,	and väj-kse, 9.
Tcheremiss.	kändä-chse, 8,	and ende-chse, 9.
Lapponian,	kak-tse, 8,	and ak-tse, 9.

The original form might have been TSAN, interchangeable with KSAN, which Prof. Schott considers as a full root for ten, while Sjögren takes KSAN as an ablative in san from kym, ten.

What is important is the establishment of NYA in the Ural-Altaic languages with the meaning of "two," a meaning which no doubt it had previous to that of "four" (a dual of two, like ashtau in Sanskrit, eight, a dual of four). NYA lost this signification of two afterwards altogether, in the Ural-Altaic branch, but it must still have possessed it at the time when these Ural-Altaic dialects formed their words for eight and nine. Other traces of ni in the sense of two, are the Ostiakian NIT SOT, which means eighty, i.e., 20—100; and also eight hundred, i.e. 8 × 100; nît being, in the latter case, the usual word for eight, a corruption of NJIGEDLA-CH. In Vogulian NJOL-SAT is eighty, i.e. 20—100. In Mongolian eight is NAIMAN, i.e. 2—10; and even the Tungusian six,

NJUGUN is explained as 2×3. In Vogulian NJALA-LU is eight, i. e. 10—2.

To return to the Hungarian KILEN-CZ. This is explained by Prof. Schott as a composition of cz, ten, and kilen, an adverb, meaning "without," or "minus." The "one" which ought to have been added has been dropped, as in the Ostiakian, where, in the dialect below Surgut, nine is expressed by ürch jeung, while above Surgut it is ej erek jong, one without ten.

In Turkish we saw the root T-S used before in o-tuz, thirty. Prof. Schott detects the same root, which has been identified with K-S, in the Turkish SE-KIZ, eight, and DO-KUZ, nine. In both words, however, he supposes that K has been lost at the end of the words of one and two; for, according to his statement, se in sekiz stands for jak, the Mandshu name for two as preserved in jak-on, eight, i. e. 10—2, while do is traced back to tok, and this to okt, one.

Another root for 'ten,' is found in the Lapponian LOKKE, and LOGE; which in Vogulian became LAGA and LAVA; finally LÔU, and in Tcherem. LU. From this we have the Vogulian njala-lu, 8, i. e. 10—2; and anta-lu, 9, i. e. 10—1; one, anta, being the same as the Tcheremissian ende in ende-chse, 10—1 =9. In the Tcheremissian, LU occurs in Kum-lu, 30; in Kok-la, 20; in viz-lu and viz-le, 50. In Turkish the same root is traced in el-li, fifty, and allig; where al would be an assimilated form of at, Vogulian at, five.

A third root for "ten" is one of a very pliant nature if we accept Professor Schott's identifications. The Turkish ON, the Ostiakian ÄN, and their derivatives; the Mongolian AN, in dalan, 70, yer-en, 90; the Mandshu IN, in orin, 20, and the mere I in dech-i, 40, are all traced back to this root. The same root is pointed out in Mongolian jis-un, i. e. 10—1; and Tungusian jag-in, 9, i. e. 10—1. Likewise in the Tungusian word for eight, jak-un, i. e. 10—2.

In Tchuvashian, ten is VONNA, and VAN. The same root is found again in Hungarian hat-van, 60, and het-ven, 70; both varieties of the same word.

The Ostiakian JANG and JONG, and the Samoiedian JU are likewise referred to this radical.

The Tungusic MEN, 10, and MER, in gur-mer, 20; the Vogulian MEN, in näli-men, 40; the Mongolian MAN, in nai-man, 8, *i. e.* 10—2; the Vogulian PEN in ät-pen, 50; the Syrianian MYN in nelja-min, 40; and MYZ in ko-myz, 30; the Turkish MYSH in alt-mysh, 60; the Syrianian MYS, in jâ-mys, 8, i. e. 10—2, and ok-mys, 9, i. e. 10—1; and finally the Tchuvash MILJ in sit milj, 70, are also brought under the same category.

MEN is again supposed to have been changed into MA in Turkish jer-ma, 20; Yakut, sür-mä; Tchuvash, sir-im; and Osmanli yigir-mi.

A new change takes place in the Tungusic dialects. Here we find this root for ten, as JAN and JUAN, as JAR and JU. Thus jur-jar, 20, would stand instead of jur-men.

A fourth and fifth root for ten are added by Prof. Schott; the one being the Mordvinian KÄMEN (gämen, käm and kä); Esthonian KUMME; Finnish KYMMENE; the other the Mongolic ARBAN.

If in the Ural-Altaic branch "ten" is expressed by five different roots, we need not wonder that the Tamulic branch also has fixed upon its own root for ten, which is PAT.

The pronouns of the Ugric and Tamulian languages show but faint traces of relationship. The characteristic letters of the personal pronouns in the Ugric branch are M, T, S, for the three persons: identical with those of the Arian languages. Whether this coincidence between the Ugric and Arian pronouns should be considered as the result of primary connection, or as a mere phonetic accident, depends on the view which we entertain of the origin of language in general. Certain it is that the coincidence between the Lapponic pronouns

Mon, Todn, Sodn,

and the Swedish Min, Din, Sin, can no longer be explained by supposing that the Lapps borrowed these pronouns from their neighbours, the Swedes*; for the same pronominal bases exist in Ugric

* Gyarmathi (p. 17) considers this Swedish origin of the Lapponian pronouns as

dialects, which have never been in contact with Swedish. Besides, supposing for a moment that pronouns could thus be imported, no one would lightly admit that the terminations of the verbs also had been transferred from the same source; and that the Tcheremissians, for instance, had not distinguished the three persons of the verb, lodam, lodat, lodas, I read, thou readest, he reads, until they received the materials for these verbal forms from Teutonic sources. I believe that the similarity of the pronouns in Ugric and Sanskrit has an historical meaning, but that its explanation must be sought in earlier times than the Finnic migration toward the north of Europe. How early some of the Turanian pronouns began to lose their primitive character may be seen in the Scythic Inscriptions at Behistun, so ably decyphered by Westergaard and Norris. In one of the last numbers of the Journal of the Asiatic Society, the latter ingenious and patient scholar gives us the following pronouns as the result of his investigations.

Hu (I), Ni (thou), Yufri (he); Niku (we),—(you), Appi (they). Here the pronoun of the first person shows the same base as the Arian aham, ego, Guzerati. hun. M, as the exponent of the first person, shows itself in the possessive mi, mini; thus bearing witness to the existence of the two bases of the pronoun of the first person, which we find in all the Arian and in some Turanian dialects. As in the Arian dialects the guttural base properly belongs to the casus rectus, the labial base to the casus obliquus; we find in Scythic, also, Hu for the nominative, and Mi for the possessive.

But although the pronouns in different branches of the Turanian family have diverged so much from their original type as to render a phonetic restitution of the Ugric and Tamulic pronouns extremely hazardous, we may yet point out as a coincidence the absence in both

a fact. He says, "verum equidem est, quod Pronomina personalia Lapponum mon, todn, sodn, à Suecorum min, din, sin, descendisse videntur." Castrén (De Affixis, p. 63) admits the same supposition, not indeed for the first and second person, but for the Finnic pronoun of the third, hän. I give his own words: "Quod denique ad tertias personæ pronomen hän attinet, tanta est ejus cum prisco septentrionali pronomine hann, Svetice han, similitudo, ut videatur nobis Sjögren summo jure originem peregrinam ei tribuere." The same grammarian goes still further, and derives the termination of the Syrianian passive sya from the Russian СЯ, for instance, ystysya, I am sent.

of the relative pronoun. The Tamulic languages have no relative pronouns, and in Turkish the relative pronoun is evidently borrowed from Persian.

There are other parts of grammar, however, which offer more positive evidence, and have preserved a common type with so much tenacity, that, although the people who speak these dialects are separated by the whole continent of Asia, we can still discover that they once resided in close proximity, and received the first impressions of their grammatical system, as it were, in the same school.

As it would be impossible to go here through all the chapters of the Tamulic and Ugric grammar, and as there are many points in each of later growth and secondary importance, I shall only dwell on those features which have been pointed out by Tamulic scholars as *essential* in Tamulic grammar, and shall endeavour to show their equivalents in the different dialects of the Ugric and Tataric speech. I take the characteristic features of Tamulic grammar as collected by Ellis in his Introduction to Campbell's Teloogoo Grammar, and from Weigle's excellent sketch of Canarese grammar.

I. "Roots in Canarese," as Weigle says, "are monosyllabic, bisyllabic, and trisyllabic. The latter can generally be reduced to a more simple form."

"Ugric as well as Tataric roots are originally monosyllabic, but bisyllabic and trisyllabic exist, which generally, but not always, can be reduced to a monosyllabic form." See Boethlingk, Yakute Grammar, § 442.; Castrén, Ostiaké Grammar, § 96.; Tsherem. Grammar, § 8. "Ceterum voces polysyllabæ a primitivis bisyllabis plerumque derivantur."

II. "Some Tamulic roots are also used as nouns, or become nouns by slight modifications; or, as Rhenius expresses it, verbal forms may be declined, and nouns be conjugated in Tamil." The same feature in the Ugric languages has been discussed before, page 296.; see also Boehtlingk, Yak. Gr. §§ 235., 339., and note 71.

III. In order to avoid ambiguity, different dialects sanction either the verbal or the nominal character of a root. Thus, it frequently happens that in one dialect a root is verbal only, in another nominal only.

"In Tamil accarei occurs only as a substantive; for instance,

yenac accareiyillei, it is not a want to me, i. e. I do not want. In Canarese accariy is common only as the root of a verb; accaríyadu, to be desired." (See Ellis, Introduction.) The same habit, with regard to Ugric and Tataric dialects, has been discussed before, page 303., and by Boehtlingk, in his Yakute Grammar.

IV. "Particles in the Tamulic languages show more or less clearly their origin from simple nouns."—"The postpositions of the Ugric languages do not constitute a separate part of speech, for with few exceptions they are real nouns. Adverbs, like postpositions, are derived from nouns by different inflections." See Castrén, Ostiake Grammar, §§ 127. 129., Yakute Grammar, § 402.

V. "Compound nouns are comparatively scarce in the Tamulic branch; they occur in the more ancient dialects as imitations of Sanskrit compounds." (Weigle.) "In the Ural-Altaic languages the scantiness of compound words has led several scholars to deny even the possibility of real composition in this family of languages. This point has been discussed, and particularly with regard to the Finnic languages, by Boehtlingk, p. xxxi. Kellgren, p. 31. The power of forming compound words, though not used extensively, exists, however, both in Tamulic and Ugric. For instance, Syrianian ydzyd-tos'a, longa barba ornatus; ydzyd-koka, longis pedibus præditus; kos-soja, sicca manu. — Canarese, dâvare gannu, lotos-eyed. In Syrianian Castrén speaks of "*many*" compound words. § 42. Gr. Syrian.

VI. "Canarese adjectives may either be placed before the nouns which they determine; in this case they have no inflections: or if they are used as substantives, they are joined with the pronoun of the third person, and then declined in a manner which reminds us of the strong declension in German." (Weigle.) "Adjectiva Tsheremissa declinari quidem possunt similiter atque substantiva; quum vero attributa substantivorum sunt, non declinantur. Ex. jazo, magnus; jazovylä, magni; jazo edemvylä, magni homines." See Gr. Tsherem. § 15.; Gr. Syrian. § 73.

VII. The Tamulic languages have no distinct forms to express the comparative and superlative. The same deficiency exists in the lower branches of the Ural-Altaic family, but has been remedied in its more developed members. In Yakut the absence of the degrees of com-

parison is quoted by Boehtlingk as a "logical characteristic of this primitive Turkic idiom."

VIII. Gender in the Tamulic languages is distinguished only by means of pronouns; and that only in the third person. The third person of the verb, being formed by pronominal affixes, has three forms to distinguish the three genders. Adjectives are not subject to any change to denote the incidents of gender, number, or case; nor are the distinctions of gender denoted in *primitive* nouns by any distinct forms of termination. The pronouns therefore vary, not according to the grammatical *gender* of the nouns to which they refer, but according to the natural *sex* of the objects expressed by the noun. The Tamulic languages admit a "sublime gender" and an "inferior gender." All rational beings belong to the former class; while the latter comprises the whole of the irrational creation, whether animate or inanimate. For the singular the sublime gender is subdivided into masculine and feminine.

The Finnic languages have not even these remnants of grammatical gender. The pronoun of the third person is the same, whether applied to male, female, or inanimate subjects; so is the third person of the verb. "Omnes omnino linguæ Finnicæ originis carent genere." The difference, therefore, between the Ugric and Tamulic languages is only this, that the latter have three pronouns of the third person, while the Ugric have but one. In other respects grammatical gender is ignored by both.

IX. The plural in Canarese is expressed by the termination ar, whether the noun implies a male or a female object. In Gond the plural is formed by nk; in Telugu by lu (ru); in Brahvi by k and t. The termination gal, which is used for nouns expressive of inanimate objects, has been called a neuter termination; but in reality it is only a secondary affix, expressive of abstract totality. Dr. Stevenson considers the Tamil gal, Canarese galu, and Telugu lu, to be abbreviations of the Sanskrit sakala, which in Tamil becomes sagala, in Marathi sagale.

The old Ugric termination of the plural is äs, or, if we consider ä merely as a connecting vowel, s. This exists in the Syrianian jas (äs). In Lapponian the s becomes h, in Finnish t, which exists in the Ostiakian et. According to Castrén, the original form of the plural

was t. This is changed in Hungarian and Lapponic into k, in Kamassian into j e, s a ŋ, s ä ŋ; in Samo. Ostiakian into l a. In other Samoïedic dialects it is elided, or leaves only a final aspiration. This simple termination has frequently been replaced by secondary forms, such as the Tsheremissian v y l ä. These plural terminations in the Tataric, Mongolic, and Tungusic languages are, as Castrén says, "propriæ indolis et recentioris ut videtur originis." In Turkish the original sign of the plural was t or s; this s in Osmanli became k; but l e r is now used as a secondary formation of the plural in Turkish.

While the Tamulic had retained the distinction of sex in the pronoun of the third person, which the Ugric has lost, the Ugric in some of its dialects (Samoïedian, Lapponian, and Ostiakian) has preserved traces of a dual, which has disappeared in all Tamulic dialects. In Ostiakian the termination of the dual is k a n, x a n, g a n; in Yur. h a', g', k'; in Taw. and Kamass. g a i; in Samoïed-Ostiakian g a, k a. In the Irtishian dialects of the Ostiakian, in Lapponian and Kamassian, however, nouns and adjectives have lost the dual, and pronouns and verbs only have retained it. In the Samoïed-Ostiakian, it is the pronouns that have lost the dual. Castrén derives the termination of the dual from a particle k a or k i, which means a l s o; as in w e l i k i, fraterque.

X. In Canarese there is a third termination of the plural a n d i r. This is used only after nouns which express relationship. Weigle supposes that it was originally an honorific particle, though he admits that "this cannot be proved." Gyarmathi writes, "Habent autem tam Hungari quam Lappones præter pluralem hunc alium adhuc numerum pluralem, qui non in omnibus observatur vocibus, sed tantum in nominibus cognationis (L. t y a h; H. m e k). Significat vero is, non personas pluralitatem, sed consortium aut sodalitium cum illa persona junctum. Duplicem hunc pluralem, Hungari possessivis tantum nominibus tribuunt, Lappones vero nominibus cognationis simplicibus." The nature of this Lapponic plural will perhaps serve to explain the original meaning of the Canarese a n d i r.

XI. In the Tamulic as well as the Ugric languages, the declension of the plural is the same as in the singular. The same terminations which in the singular are added to the base, are in the plural added to the base after it has received the nota pluralis. A Turkish noun,

after it has taken ler as the exponent of plurality, is considered as a singular so far as case terminations are concerned (ler, ler|iñ, ler|e, ler|i, ler|den.) The same in Hungarian. After k has been added to the base of the noun, no further distinction is made between the cases of plural and singular. This is a great advantage in Turanian grammar, if compared with the Arian system of declension. The same simplicity and lucidity distinguish the Tamulic declension where, after gal is added, the plural is the same as the singular. The same system has been imitated by the Bengáli and other Sanskritic dialects. The sign of the plural in Bengáli (dig) has been explained by Dr. Stevenson as an abbreviation of the Sanskrit âḍika (âḍi); a derivation which, though not yet confirmed by historical evidence, is much more probable than one proposed by myself in a former essay. In Asamese the signs of the plural are bilak, hont, and bur. The only irregularities which occur apply to the nominative, where in some dialects the old plural in r or n is maintained. Occasionally, also, the contact of the terminations with the sign of the plural gives rise to phonetic changes.

XII. But, while nothing can be more regular and intelligible than this Turanian process of distinguishing the plural from the singular, plurals occur particularly in the pronouns which seem not to be formed by external addition, but (to adopt a favourite expression of Arian grammarians) to have been produced by some unknown process from the body of the noun. This applies particularly to the pronoun of the first and second person. The change of Hungarian me (I), te (thou), into mi (we), ti (you); of Syrianian, me, te, into mi, ti; of Mordvin. mon, ton, son, into min, tin, sin; of Lapponian mon, ton, son, into mi, ti, si; of Finnish minä, sinä, hän, into me, te, he; of Tsheremissian min, tin, into mä, tä; and of several other languages, which may be seen in the comparative table of pronouns, is certainly not based on agglutinative principles. Whether we have a right to assume that these forms were therefore produced by an internal revolution, an idea of which no clear conception can be formed, remains to be proved. But if such changes as Sanskrit yas, and Greek ὅς, becoming in the plural ye, οἵ, are considered peculiarly Arian, the above-mentioned Turanian forms will serve to show that they are not so. And it should be remembered that similar

forms exist even in the lowest and least developed of the Turanian languages, as, for instance, in the Taï. The Kassia pronouns, nga, I, pha, thou, become ngi, we, and phi, you.

In the Tamulic languages the plural of pronouns exhibits the same exception. The Canarese nân, nîn, tân (I, thou, himself), form their plurals not by an additional ar, but as nâvu, nîvu, tâvu. In old Canarese the plurals are nâm and tâm, while the plural of the second person is formed by means of the usual plural sign r; nîr, you. In several cases it is clear that the Turanian languages used a different base in the plural from that used in the singular. This is intelligible; but about the process which raised nga into ngi, or me into mi, we know as little as about the growth of the Sanskrit yas into ye. Whether we explain the change of ya into ye by an additional i (ai = e), or whether we look upon *e* as an evolution of *a*, in either case we assume facts which we do not know, and never can know, either by means of analogy or induction. But if afterwards we base further conclusions on grounds so hypothetical, if we classify languages according to what we thus assume, to have been their principle of formation, we really are trying to stand on our own shoulders, and lose entirely sight of the necessary limits of our knowledge.*

XIII. It is owing to the influence of Sanskrit grammarians, as Weigle says, that in early times the number of case terminations in the Tamulic languages has been fixed at eight. Most of them are particles attached to the noun and there is no doubt that the whole declension could be reduced to one casus rectus and one casus obliquus. The ancient dialects are richer in these case-particles, which express more delicate shades of meaning, so that even a larger number of cases might here be admitted than is usually found in grammars. It is more practical, however, to consider these particles as separate syllables. The same opinion is expressed by Dr. Stevenson. He writes,—"Twice seven cases might easily be made out in the Dekhan dialects."

Exactly the same applies to the Ugric languages. I quote Castrén (Gra. Smyr. § 24.); "Omnes omnino linguas Finnicæ originis

* See some excellent remarks on a similar point in Boehtlingk's Yakute Grammar, p. iii.

varietate casuum abundant. Casibus non solum indicant actionem, quæ notio in lingua Syriæna inest Nominativo, Genitivo, Dativo, Accusativo, Infinitivo, Ablativo II., Instructivo, atque statum, casibus Essivo, Factivo, et Caritivo expressum, sed etiam varias loci relationes quæ in aliis linguis præpositionibus reddi solent, at in Finnicis ipsaque Syriæna casibus Allativo et Illativo, Adessivo et Inessivo, Ablativo I., Elativo, Consecutivo et Prosecutivo."

The distinction which Dr. Stevenson tries to establish between a post-position and the sign of a case, that the one is by itself significant, while the other is not, is true in the abstract, but not always in reality. Many post-positions in Tamulic and Ugric are no longer intelligible as independent words, though they clearly have descended from nominal or pronominal bases.

XIV. There are, however, some terminations in Tamulic as well as in Ugric dialects, which, as they express the most general grammatical categories, have become fixed and technical. These, in either branch, have a claim to a higher antiquity than other terminations or affixes whose origin is more palpable. With regard to these primitive terminations, attempts have been made to identify the corresponding forms in Ugric, Tataric, and Tamulic languages. Dr. Stevenson compares—

(1.) The Tamil Accusative in ai, (Malay e) with the Turkish Dative î.

(2.) The Tamil Dative ku, Canarese ge, Telugu ki, ku, ko, Malayalim ka, with the Dhimal (Bhotîya) kho, the Tibetan gya, the Tataric ga.

(3.) The Genitives (or Adjectives) in n, such as Canarese ana, ina, Tamil in, Telugu ni, Gond na, with the Turkish in, Lapponian en, Finnish n, Mordvinian en. In Tchuvashian we have from man, I, manyng, meus, man-yng-yng, mei; again, man-yng-ki, meus, ὁ ἐμός; man yng ki nyng, mei.

XV. The Ugric languages have two classes of post-positions, simple and compound. In Finnish, for instance, the simple Partitivus is formed by tá, the Illativus by s. Both together form the Prosecutivus tse; as karhu-tsé, passing along the bear. The same in Canarese, we meet with compound cases, such as maneyellinda, Locative and Instrumental, "from within the house."

XVI. With regard to the personal pronouns, the admission of their apparent difference in Tamulic and Ugric has already been made. Instead of the characteristic letters m, t, s, we find n, n, t. The older form of the Canarese pronoun of the first person, yan, instead of nan (Malayalim, gnaṅ, Uraon en), might indeed be reconciled with the subjective base of the first person in some of the Ugric dialects; and the initial n of the second be derived from a t, as in Syrianian, Ugro-Ostiakian and Samoïedic dialects the original t of the second person has been supplanted by an n.* But as all intermediate links are lost (except Uraon, asu, you), such comparisons would only show the phonetic possibility, not the historical reality of the common origin of the pronouns in Ugric and Tamulic.

XVII. In the Ugric and Tamulic languages the pronouns form their plural by a modification of the base, not as in substantives, by the addition of a suffix expressive of plurality.

Syranian :

Me, I, and Te, thou, Sya, he, become in the plural
Mi, we, and Ti, you, Nya, they,

while the common termination of the plural is jas.

In old Canarese,

Nân, I, Nîn, Thou, Tân, ipse, become
Nâm†, We, (Nîm, You), Tâm, ipsi.

XVIII. Besides the usual personal pronouns, most Turanian languages have produced a large number of polite or conversational pronouns, such as "Servant," "Elder Brother," "Sister," "Blockhead," &c. Their number becomes smaller with the progress of civilisation and literary culture. Hence but few traces of them remain in the Tamulic, and hardly any in the Ugric branch.

XIX. The coincidences between the numerals in the Tamulic and the other branches of the Turanian family have been discussed before. Besides the agreement in several radicals, it was shown there that the Tamulic shared in the thoroughly Turanian feature that "seven,"

* Cf. Castrén, De affixis, p. 71; also p. 66.

† The modern plurals are, nâvu, nîvu, tâvu, showing the same transition of m into v which we find in the termination of the future, which is m in old, v in modern Canarese.

is the last common numeral, the words for "eight" and "nine" being formed by means of substraction from ten (10-2, 10-1).

XX. With regard to the verb, we have first to point out in Tamulic the double system of personal terminations, one for the present, the other for the past. The origin of these two classes of terminations has been discussed in the first part of this letter, and we need only add here, that in Tamulic also the shorter terminations belong to the past, the fuller to the present.

XXI. The radical termination of the present in Tamulic, which is p in old Canarese and Tulu, and utt in modern Canarese, kir in Tamil, kindr in old Tamil, must most likely be considered as a participial suffix, like the termination er of the present in Turkish. The coincidence between the Canarese utt, and the termination of the present participle uttâ, is sufficient to allow this hypothesis. The termination of the preterite is actually the same in Turkish and Canarese, d, for which in old Canarese we find i, the terminations of the past participle in Canarese being likewise i and ḍu.

XXII. The infinitive in Canarese was originally al or alu, its modern form ad or adu. The latter termination has been recognised by Weigle as the pronoun of the third person, adu. In Syrianian the participle is formed by ysj, ys being the pronoun of the third person preserved in the possessive suffix ys, as purt-ys, his knife. Another form of the infinitive is vana or ana, and this reminds us of the Syrianian infinitive in yny.

XXIII. Canarese has no passive form, but expresses this form of thought periphrastically. For instance, "he eats a beating," instead of "he is beaten;" "he falls a choosing," instead of "he is chosen." Similar contrivances are known from Chinese, Tibetan, and other languages which have not yet left the first stage of materialism in their grammatical growth, and from others, like Bengali, which have relapsed into that state after having passed through the highest development of grammatical forms. In Chinese * they use kian, to see; for instance, paò, to protect; kian paò, to be protected.

Another passive auxiliary in Chinese is peì, to receive; for instance, k'ian-ts'e, to punish; peì tc'ao-ti'ng k'ian-ts'e, to be punished by the Emperor, i. e. to receive Emperor-punishment.

* Endlicher, Chinese Grammar, § 230.

A third root is k'i, to eat. For instance, tà, to beat; k'i tà, to be beaten.

In Kachâri, a Bhotîya dialect, the passive voice is usually formed by means of an auxiliary verb, signifying to be, to eat, to exist, added to the root of the primary verb. Thus, from bú, strike, and jâ, eat, we have—

Present tense, A'ng bu já dang, I am struck.
Imperfect, A'ng bu jábái, I was struck.
Perfect, A'ng bu já dangman, I have been struck, or I have eaten a beating.

In Bengali I remember to have met with similar expressions, khâi, to eat, being used as the auxiliary of the passive. But though I cannot refer to a Bengali authority, a reference to the spoken dialects of Germany would suffice to prove that languages, after producing the most abundant grammatical organisation, fall back again upon these simple and childish expressions. As in Chinese, we may say in German, Schläge besehn, to see blows, Prügel kosten, to taste a beating, in the sense of to be beaten.

In Syrianian no passive exists, except that, on the authority of Castrén, we must admit a passive borrowed from Russian. I subjoin the ipsissima verba: "Passivi finis est —sja, l.-cja (Russ. C), qui adjungitur secundæ personæ imperativi. Ut forma passiva e lingua Russica orta est, ita sæpe vi verbi reflexivi utitur, quæ vis participio semper inest. Quare passivum etiam per verbum auxiliare redditur."

This would show Syrianian at a great disadvantage if compared with Tamulic dialects. Both were deprived of a passive, both were brought in contact with languages, Sanskrit and Russian, possessing a passive form. But while the Tamulic languages supplied their deficiency by an ingenious application of their own resources, the Syrianian stooped to borrow a grammatical form from its more powerful neighbour—a grammatical depravity almost without a parallel in the whole history of human speech. Other Ugric languages possess a passive. For in Mordvinian, although the participle is used in an active and passive sense, the terminations vàn, vat, vi, have always a passive power.

XXIV. The coincidence between the Tamulic and Tataric lan-

guages with regard to a negative conjugation has attracted the attention of several writers.

As to the Finnic dialects, which we have chosen as the most appropriate for the purpose of comparison with the Tamulic, they share in the same grammatical feature: "Conjugatio negativa omnibus Finnicis linguis propria." (Castrén, Grammat. Syriæna, § 66.)

The negative conjugation in Bengali and Mahratti is perhaps an imitation of Tamulic, but formed in a different manner.

XXV. A causal form is produced in Canarese by appending isu to verbal bases. In old Canarese this isu is represented by ichu, in Tamil by ka. The same derivative is employed to form denominative verbs, and is of frequent occurrence at the end of foreign words thus verbalised in Canarese. It then corresponds to the termination ize in English, iren in German.

In the Ugric and Turkic languages causal and denominative forms are so frequent that they are mentioned as a characteristic feature of this class of dialects. The suffixes, however, by which this modification is expressed vary even in Ugric and Turkic. Causatives in Finnish are formed by tan, in Lapponian by tam, in Syrianian by ta. The Turkic dialects show a final r in tar and dar. Neither do the terminations of verbs derived from nouns offer any coincidences, and it is only the frequency of both these verbal forms which constitutes a congruence between Tamulic and Ugric dialects. Literal coincidences between the verbal derivatives used by the Turanians North and South of the Himâlaya, might indeed be pointed out, but they would be of little weight unless the genesis of both could be made out at the same time, thus establishing, not an accidental similarity of sound, but a real identity of origin. Inchoative verbs, which are a class of denominative verbs, are formed in the Turkic branch by a final guttural. This might provoke a comparison with the Tamil ka. But in the Turkic branch * this guttural can be traced back to an original palatal vowel, while in Canarese no light has yet been thrown on the analysis of this termination. The same remark applies to the Hungarian derivative it, by which denominative verbs are formed.

XXVI. The auxiliary verb "to be," in the Tamulic languages, has

* Cf. Boehtlingk, Yakut Grammar, § 493.

likewise attracted attention by its great similiarity with Turkish. There are two bases for this verb in Canarese, ir and u*ll*. In Turkish, one of the radicals of the auxiliary verb is ol, which is shared in common by Turkic and Finnic dialects. It is the Syrianian völi, I was; the Tcheremissian olam, I am. Its radical is originally a pronominal base, and in the same manner the Ostiakian tâjem, I am, is derived from the pronominal root tâ, that.

XXVII. Before we leave this comparison of the leading grammatical features of the Tamulic and Ugric languages, it will be necessary to exhibit at least a few traits of their syntactical similarity. The arrangement of words and sentences might perhaps appear so entirely a matter of individual choice and taste, that we could hardly expect coincidences between nations who, so far as history and tradition can reach back, have always been distinct in their language and nationality. Yet there are no doubt laws, powerful as any in the realm of nature, which make it impossible for certain languages to place their words in the same succession as those of other dialects. No Semitic mind can realize the idea of "ox-tail;" no Arian mind can break itself into the conception of "tail-ox." The following will show how far this influence extends, and how important an argument it is in favour of or against the long-continued community of nations.

The syntactical characteristics of the Tamulic family are taken from Rhenius*; those of the Tataric languages from Schott.†

Tamulic.	*Tataric.*
1. As to the position of the parts of a sentence, the subject always precedes the finite verb, and the latter always concludes the sentence. All other words which depend upon these principal parts precede them respectively; so that the most important of the dependent words is placed nearest to its prin-	1. Every word which determines, and so far as it determines, another word, takes precedence of the latter without exception. The object precedes the verb, because the verb is determined by its object, inasmuch as it individualises the action of the verb.

* Tamil Grammar, p. 117.

† Essay on the Tataric Languages, p. 3.

Tamulic.	*Tataric.*
cipal, and the least important farthest from it.	
2. The adjective always precedes the substantive; as, "good-father."	2. The adjective precedes the substantive.
3. The noun precedes its governing participle or preposition; as if "father-loving," "father-from."	3. The object precedes the verb; what depends on a preposition precedes the preposition (i. e. post-position). The post-position is originally a substantive standing to the noun in the relation of a genitive.
4. The adverb precedes the verb; as, "I shall much love."	4. The adverb precedes the verb.
5. The infinitive precedes the governing verb; as, "to eat go."	5. This would be included under No. 3.
6. The negative branch of a sentence precedes the affirmative.	6. A relative sentence comes before the relative upon which it depends.
7. The number precedes that which is numbered.	7. See No. 2., and add the possessive pronominal adjective preceding the noun.
8. The genitive precedes the governing noun; such as, "king's palace."	8. The genitive precedes that which governs it.

From these general remarks it is evident that the order of the parts of speech in Tamil is opposite to that in English, so that the European student has to effect an entire change in the arrangement of his ideas.

After enumerating the organic and fundamental coincidences which affect the formative principles of these two extreme members of the Turanian family, we need not dwell much longer on smaller traits of similarity. Yet, as in a picture a single line may often help to bring out a likeness which did not strike the eye before, one feature may at

least be mentioned, which, though in itself of little significance, is yet of interest to those who are fond of watching the wonderful instinct of language in its various manifestations.

The Canarese * possess, for the expression of collective ideas, a large number of what are called "pair-words," or "double words." They resemble the English "topsy-turvy," "chit-chat," &c. In most of them the principle of alliteration has been observed, and many obsolete words have been preserved in these compounds only. It is curious that, as in German many expressions of this kind have been kept in legal documents, the Canarese law, anterior to the Mohammedan conquest, teems with the same class of compounds. In some cases the Canarese simply repeats the same word, changing the first syllable into gî, in order to give it a collective or more comprehensive meaning. A Brahman says that he has to perform snâna gîna, which means bathing (snâna) and similar ceremonies connected with it. Nîru is water; nîru gîru, water and similar things. Âta is play; âta gîta, play and other amusements. Mâtu is speech; mâtu gîtu, speeches and the rest. Ârasu, king; ârasu gîrasu, the king and other magistrates. Not only Sanskrit words, but even foreign terms taken from English, have to submit to this process, and a Canarese cook, who has to prepare the dessert, speaks of it as "cake gîke.

Gyarmathi describes the same peculiarity in the language of the Hungarians and Laplanders. Both, he says, delight in forming such expressions as

Lapponian —	Pékkest pekkai.	Hungarian —	Diribrol darabra, de frusto in frustum.
„	Jepest japai.	„	Eszendöröl eszendöre, de anno in annum.
„	Katest katei	„	Kezröl kezre, de manu in manum.
„	Orron orroje.		Örökkön örökke, in æternum.
„	Lakkas laka.	„	Idebb idebb, non procul.

* Weigle, On Canarese Language and Literature, p. 276.

Lapponian — Pako lako. Hungarian — Pelda beszed, adagium.

In Malay, again, the same feature is most prominent. It exists there, as in Canarese and the Ugric languages, not only in isolated cases, or, as in German, in obsolete words and expressions, but as a grammatical principle applied in various manners, — all showing that plastic power of language, which is able to express the intellectual and merely formal by the material, and which in the Arian languages also has left the traces of its former existence in such forms as the Intensive, Desiderative, and similar grammatical derivations.

In Malay* a word is sometimes simply repeated, as mata-mata, a scout.

When, however, an inseparable prefix is annexed to a radical, this prefix is usually omitted in the second member of the reduplication, as bârlari-lari, to run on; barturut-turut, consecutively.

When the word is a verb having a reciprocal sense, the particle is annexed to the second member of the reduplicated word, and not to the first, as bunoh-mâmbunoh, to slaughter frequently and mutually.

Sometimes, the reduplicated word is a primitive of which the etymology cannot be traced, as antar-antar, a rammer; rama-rama, a butterfly.

More frequently, the etymology can be traced, although the derivation is often whimsical. From api, fire; api-api, a firefly. From anak, young; anak-anakan, a puppet. From kera, to think; kera-kera, to conjecture.

Adverbs are frequently formed by the reduplication of other words, as from kunung, sudden; kunung-kunung, suddenly. From churi, to steal; churi-churi, stealthily. With this compare Italian poco poco.

Often the reduplication of an adjective makes only an intensitive, as bâsar-bâsar, very great; manis-manis, very sweet.

The mere love of alliteration has contributed to multiply these reduplicatives. Thus gilang-gâmilang, effulgent. So laki,

* Crawfurd, Malay Grammar, p. 57.

a man, is most generally written and pronounced laki-laki, and this by abbreviation becomes lâlaki, man. Similar abbreviated reduplicated words are, lâlaba, a spider, instead of laba-laba; pâpuwah, frizzly, instead of puwah-puwah. This is one of the many cases where in a Turanian language we can watch the process of which in Arian dialects we see but the result. What better explanation can be given of intensive or frequentative verbs, such as yâyâ*k*, to implore, from yâ*k*, to ask, in Sanskrit, than lâlaki, man, instead of laki-laki?

What, then, it may be asked, is the difference between such forms as pointed out in Nomadic and Political languages? It is this, that Nomadic languages retain the consciousness of this process, and therefore can apply it to any word, though it has never been applied to it before. They know that lâlaki is laki-laki; they still use both; while, to a Hindu, yâyâ*k* was as little a repetition of yâ*k*, as παιπάλλω and δαιδάλλω were to a Greek, gurgulio and gingrio to a Roman.*

CONCLUSION.

THE POSSIBILITY OF A COMMON ORIGIN OF LANGUAGE.

HERE I must close for the present this communication on the Tamulic languages, and their claims to be considered a branch of that vast family of speech which should be called *Nomadic* or *Turanian*, in contradistinction to the two political concentrations of human speech, the *Arian* and *Semitic*. I doubt not that the results at which I have arrived, and the method by which I have been guided, will be questioned on ethnological as well as philological grounds. To classify languages as such, regardless of the physiological characteristics of the races by whom they are spoken, will appear presumptuous in the eyes of the Ethnologist, while to me it seems to hold out the only hope of settling eventually the conflicting claims of Ethnology and Phonology. What we are accustomed to call "race,"† and what, as

* See Bopp's Comparative Grammar, § 753.

† If "race" is derived, not from "radix" as was hitherto supposed, but from the Old High-German reiza, line, lineage, it might be retained as a technical term.

Humboldt has shown, should more properly be called "variety," may date from a period in the history of the world anterior to any division of language. Or, on the other hand, its first effects may have been felt long after the confusion of speech had led to the dispersion of mankind. In either case the classification of language could not be expected to coincide with the classification of the varieties of man. Only on the supposition that the first divergence of race took place contemporaneously with the first divulsion of language, could a coincidence between ethnological and phonological classes be reasonably anticipated, though even then the mysterious intervals of so many centuries between this first parting and the later meeting again of the world's inhabitants through war, conquests, and migrations, would be sufficient to account for any disturbance that may be now observed in the parallel progress, ramification, and intertwining of race and speech.

Physiological Ethnology has accounted for the varieties of the human race, and removed the barriers which formerly prevented us from viewing all mankind as the members of one family, the offspring of one parent. The problem of the varieties of language is more difficult and has still to be solved, as we must include in our survey the nations of America and Africa. But over the languages of the primitive Asiatic Continent of Asia and Europe a new light begins to dawn, which, in spite of perplexing appearances, reveals more and more clearly the possibility of their common origin.

In order to perceive this, and to command this wide view, we must put aside the microscope through which we examine the organism and the ramifications of so small and modern a cluster of dialects as the Arian and Semitic. Different subjects require different methods, and because the method of Bopp and Grimm has been found applicable to an analysis of Arian speech, it does not follow that the same would lead to satisfactory results in higher and more comprehensive branches of linguistic study. We must open our eyes, and ask ourselves what, according to the nature of the case, we can expect to scan and to comprehend, even from that distant point of view, which we necessarily occupy in looking toward the primordial epochs of the history of language. The millions of people who speak and have spoken for centuries from Ceylon to Iceland the innumerable dialects

of Sanskrit, Persian, Gallic, Teutonic, Sclavonic, Italic, and Greek, shrink here together into one small point, and are represented, as it were, by one patriarchal individual, the first Arian, the ancestor of the Arian race. For on all these languages, from Sanskrit to English, there is one common stamp.—a stamp of definite individuality—inexplicable if viewed as a product of nature, and intelligible only as the work of one creative genius. Sanskrit, Persian, Greek, Latin, Sclavonic, Teutonic, and Celtic, are simply continuations of one common spring of language, as much as Spanish and Portuguese, French and Provençal, Italian and Wallachian, are all but Latin under different aspects. The differences between languages, as distant geographically, chronologically, and grammatically, as Sanskrit and English, vanish; and all that remains in this comprehensive view is, that one system of grammar, and that patrimony of common roots, which we call Arian, in opposition to Semitic. No new root has been added, no new grammatical form been produced in any of the Arian provinces or dependencies, of which the elements were not present at the first foundation of this mighty empire of speech.

The Semitic languages also are all varieties of one form of speech. Though we do not know that primitive language from which the Semitic dialects diverged, yet we know that at one time one such language must have existed. In it all the peculiarities which now distinguish the three branches of Semitic were not yet developed, but they must have existed potentially. We cannot account for the coincidences between the language of Mohammed and Moses without the admission that, before the separate existence of the oldest Hebrew and the earliest Arabic, there was a real language to which Hebrew and Arabic stand as French and Italian stand to Latin.

The Semitic, therefore, and the Arian languages must be viewed as two individuals, or as the manifestations and works of two individuals which it is impossible to derive from one another. They differ in all that is formal, following sometimes opposite directions in the first principles of grammatical combination. They differ even in their radical elements, inasmuch as each adopted its own process of determining roots by reduplication of final or initial letters, or by distinct additional elements. They differ again in the meaning of roots, because it was a matter of individual choice what power should

become fixed and technical in radicals, which, according to their very nature, must originally have possessed an indefinite applicability.

But, though in physical Ethnology we cannot derive the Negro from the Malay or the Malay from the Negro type, we may look upon each as a modification of a common and more general type. The same applies to the types of language. We cannot derive Hebrew from Sanskrit, or Sanskrit from Hebrew, but we can well understand how both may have proceeded from one common source. They are both channels supplied from one river, and they carry, though not always on their surface, floating materials of language which challenge comparison, and have already yielded satisfactory results to careful analysers. It is true, if there were any strong arguments against the common origin of these two channels of speech, the coincidences between them, hitherto pointed out, would perhaps not suffice to silence them. But, unshackled as we are by any contrary evidence, and encouraged as we must feel by the success of physical research, there is even now sufficient evidence with regard to a radical community between Arian and Semitic dialects, to enable us to say that their common origin is not only possible, but, as far as linguistic evidence goes, probable; while to derive the Semitic from the Arian, or the Arian from the Semitic type, may henceforth be declared a grammatical impossibility.

Before we allow our eyes to swerve to still more distant regions, we must confront those uncounted dialects of Asia and Europe, whose grammar does not run in either an Arian or Semitic channel. They share in none of the features which distinguish the Arian and the Semitic types, and the first point which we can establish with regard to them is, that at no time, after the first separation of the Arian and Semitic types, can they have formed part of these two historical developments of language. Nothing of what is traditional, petrified, or individual in either Semitic or Arian grammar, can be discovered in any of the other dialects of the Asiatic continent. General features common to Arian, Semitic, and Turanian languages, can only be ascribed to the very earliest period of Asiatic speech.

Thus the Turanian dialects share one thing in common, — they all represent a state of language before its individualisation by the Arian and Semitic types. But these Turanian languages cannot be

considered as standing to each other in the same relation as Hebrew and Arabic, Sanskrit and Greek. In smaller spheres, similar families, like the Arian or Semitic, can be established within the Turanian kingdom. The Tamulic dialects, for instance, are held together by the same close ties of relationship as Greek and Latin, Hebrew and Arabic. They necessitate the admission of a common parent, of a long continued grammatical concentration preceding their gradual dispersion. The same applies to the different branches, which have been called Taïc, Bhotîya, Malaic, Mongolic, Tungusic, Tataric, and Finnic. The languages belonging to each of these branches, point to so many parent-languages, whence they proceeded, and which they represent under different aspects. But these branches themselves must be viewed as separate in their beginnings, neither of them being subordinate to any other, neither of them parent or offspring, but all springing side by side from the same soil, though with different powers of growth, and under circumstances more or less favourable to their grammatical organisation.

Nor can these Turanian stems be considered as standing to one another in the same relation as Semitic to Arian. The separation of these two dialects and their independent growth is the result of an individual act, unaccountable in its nature and origin, like everything individual, while the separation and divergence of the Turanian languages can be explained as the result of a gradual, natural, and simple process, which, out of many things that were possible in the mechanical combinations of roots, fixed a certain number of real forms which, under geographical and political influences, became consolidated into national idioms. As in the formation of political societies, we do not require the admission of any powerful individual mind to account for the presence of governed and governing classes, or of laws against theft and murder, but can explain these as the necessary result of social agglutination, we see nothing in the organisation of the Turanian languages that betrays the influence of some individual poetical genius, as the framer of peculiar laws, or the author of certain grammatical principles. In the Semitic and Arian languages, on the contrary, we find institutions, laws, and agreements, which, like the laws of inheritance and succession at Rome or in India, show the stamp of an individual will impressed on the previous traditions

of scattered tribes. It is possible that the Semitic and Arian languages also passed through a stage of mechanical crystallisation, or uncontrolled conglomeration of grammatical elements; but they left it, and entered into a new phase of growth and decay, and that through the agency of one creative genius grasping the floating elements of speech, and preventing by his fiat their further atomical concretion. It is after this had taken place, that the real life of Arian and Semitic language begins, and all Arian and Semitic dialects which we know are the descendants of these two languages, already individualised to the highest degree.

In the Turanian group this individual element is wanting. Hence the different branches, the Tungusic, Mongolic, Turkic, and Finnic in the North, the Taïc, Malaïc, Bhotîya, and Tamulic in the South, are deficient in that family likeness which is peculiar to the offspring of the same individual. They are radii diverging from a common centre, not children of a common parent. This explains their similarity as well as their differences. They share much in common, and show that before their divergency a certain nucleus of language was formed, in which some parts of language, the first to crystallise and the most difficult to be analysed, had become fixed and stationary. Numerals, pronouns, and some of the simplest applied verbal roots belong to this class of words. But even these parts of speech had not yet grown into a system, before the Turanian camp broke up, and hence were not retained as a whole. We may even distinguish two such nuclei of Turanian speech, a Northern and a Southern; and we may trace both back to a still higher point where their repective peculiarities are merged again into one common current. Here, where the differences between the Turanian languages cease, the first stamina of the Arian and Semitic languages also would be found to converge toward the same centre of life. Radicals, applied to certain definite but material meanings in common by all Turanian dialects, belong to this primitive era, and some of them can even now be proved the common property of the Turanian, the Semitic, and Arian branches.

And here the last question presents itself, which Comparative Phonology has to answer. Does this common ground, where the differences of Arian, Semitic, and Turanian dialects are neutralised, correspond with that stage in the growth of language, where the

vital powers of the Chinese were arrested, or is there still an interval, not bridged over by any traditions of language, between this one patriarchal utterance, and the common inheritance of the "three sons of Feridun?" Some few roots that could claim this primeval origin have been pointed out. Their number will never be very great; and their sound and meaning will always have, as Schleiermacher remarked, "quelque chose de vague." But could this be otherwise? Suppose we actually found a number of definite roots, with secondary and tertiary letters, and with complicated significations, in this common treasury of all the languages of Asia. Should we be able to explain such a fact? Would it not invalidate all arguments, and entirely destroy all conclusions to which a careful study of the broken traditions of mankind has led us? Such roots cannot, have not, and will not be found. But if the view here proposed on the origin and growth of language — a view according with all the evidence which the documents of the various dialects of Asia and Europe supply — be accepted, these vague, effaced, and fragmentary roots rise into importance, because confirming, though not proving, our anticipations, like the segments of a circle whose centre we have guessed.

As to the formal elements, or the grammatical growth of language, no difficulty exists in considering the grammatical system of Sanskrit, the most perfect of the Arian dialects, as the natural development of Chinese — an admission made even by those who are most opposed to the generalisations in the science of languages.

These two points, therefore, Comparative Philology has gained:—

I. Nothing necessitates the admission of different independent beginnings for the material elements of the Turanian, Semitic, and Arian branches of speech, —nay, it is possible even now to point out radicals which, under various changes and disguises, have been current in these three branches ever since their first separation.

II. Nothing necessitates the admission of different beginnings for the formal elements of the Turanian, Semitic, and Arian branches of speech — and though it is impossible to derive the Arian system of grammar from the Semitic, or the Semitic from the

Turanian, we can perfectly understand how, either through individual influences, or by the wear and tear of grammar in its own continuous working, the different systems of grammar of Asia and Europe may have been produced.

If we translate these grammatical conclusions into historical language, we arrive at the following facts: —

The first migration from the common centre of mankind proceeded eastward, where the Asiatic language was arrested at the first stage of its growth, and where the Chinese, as a broken link, presents to the present day a reflection of the earliest consolidation of human speech.

The second dispersion was that of the Turanian tribes. Language had slowly advanced, and formed certain deposits of numerical, pronominal, and verbal roots, before the Turanians separated and spread with their dialects to all the corners of the earth. Grammatical growth had commenced, and an abundance of forms had been thrown out from which all took what seemed useful and necessary to them according to their different tastes and characters. Certain grammatical and syntactical principles also had been deeply impressed upon the mind of the Turanian colonists before they started, and these impart to their languages a similarity, even where the material elements of the single dialects have since been changed and replaced.

We must admit two directions for the migrations of the Turanians, as indicated by their languages — a northern and a southern.

The Northern Division comprehends the Tungusic, Mongolic, Tataric, and Finnic branches.

The Southern Division comprehends the Taïc, Malaïc, Bhotîya (Gangetic and Lohitic), and Tamulic branches.

These two divisions had not arrived at any social or political consolidation before they were broken up respectively into different colonies. They probably had no laws, no popular poetry or sacred songs which might have served as a common standard. They broke up carrying away each a portion of their common language — and hence their similarity; but they possessed as yet nothing traditional, nothing like a common inheritance in language or thought, — and hence their differences.

In following the indications of the gradual advance which the

ascending scale in the grammatical growth of these different branches holds out to us, we should be led to suppose that the first migration in the south was that of the people speaking Taï dialects, who settled along the rivers Meikong, Meinam, Irawaddi, and Brahmaputra.

In the north the first migration was that of the Tungusic tribes, following the course of the rivers Amur and Lena.

Both are conterminous with China, and their languages have scarcely left the Chinese stage.

The second migration is that of the Malaïc tribes in the south, who followed the same direction as the Taï tribes, but, finding the land occupied, pushed onward to the islands and the sea.

In the north the second migration would be that of the Mongolic races, pressing on the Tungusic races, their predecessors; and then spreading westward along the chain of the Altaï mountains.

Both nations are characterised by a spirit of enterprise, which on the sea made them feared as pirates, in the desert as robbers. Their languages are more adapted for stern and short command, than for persuasive discussion and argument.

The third migration in the south tended toward Bhota or Tibet and the frontiers of India. The Kamboja peninsula and the coast being occupied, these tribes chose the high plateau, north of India, and in later times poured into India through the mountain passes of the Himâlaya. Their language, particularly where it has received literary cultivation, is capable of expressing abstract reasoning, but is liable to lose itself in artificial complications and polysynthetic confusion.

The same applies to the third migration in the north. The Turkish tribes, finding all the intermediate country taken possession of, proceeded westward to the Ural and the frontier of Europe. Their language, particularly in Turkish, arrived at so high a degree of formal perfection as to make it almost inconvenient for the purposes of common conversation.

The last colony in the south was the Tamulic, in the north the Finnic—both at an early period advanced to a high degree of civilisation, of which we find the traces even now in the wise economy of their languages, and in the few remains of their early institutions and literature. Both were crushed by the later con-

quests of Arian nations; so that in the south we have but vague traditions of their former state, and even these perverted by the jealousy of their Brahmanic conquerors; while in the fens of Finland oral tradition has handed down to us not only the names of these ancient heroes, but the very songs which celebrated their deeds.

If we adopt this view of the gradual spreading of the Turanian branches, we have to suppose that each successive migration, finding the nearest ground occupied, pushed forward to more distant quarters. This seems the more natural supposition; for if we inverted the historical order, and looked upon the last migration as the first, we should have to account for the retrograde movement in the grammatical formation of the four southern and northern dialects. Finnic would then represent the earliest state of Turanian grammar, while the Tungusic would correspond to the latest, — a view which might be defended in the later history of Arian languages, but is untenable in Turanian philology. With the former view, the different degrees of grammatical perfection, and the respective geographical distance of each branch from China, would closely correspond with the historical separation and individualisation of each Turanian branch.

Besides these northern and southern radii of Turanian speech, there are still several sporadic clusters of dialects, equally belonging to the Turanian stage of language, but left to themselves, as it were, and lost in impervious mountains and deserts. In their seclusion, and debarred from the severe attrition which every dialect experiences in intercourse with other languages, they have each produced the utmost variety of grammatical forms, and revel in a luxuriance of verbal distinctions which small and secluded tribes alone are able to indulge in.

These are the aboriginal languages spoken in the impenetrable valleys of the Caucasus; the Basque in the Pyrenees, and on the very edge of Europe, and the Samoïedic in the still less accessible Tundras of the north of Siberia.

In these secluded dialects, the peculiarities of individuals may gain an influence which changes the whole surface of grammar and dictionary. Turanian languages, particularly, are so pliant that they lend themselves to endless combinations and complexities, unless a national literature or a frequent intercourse with other tribes act as

safeguards against dialectical schism. Tribes who have no literature and no sort of intellectual occupation, seem occasionally to take a delight in working their language to the utmost limits of grammatical expansion. The American dialects are a well-known instance: and the greater the seclusion of a tribe, the more amazing this rank vegetation of their grammar. We can at present hardly form a correct idea with what feeling a savage nation looks upon its language; whether, it may be, as a plaything, a kind of intellectual amusement, a maze in which the mind likes to lose and to find itself. But the result is the same everywhere. If the work of agglutination has once commenced, and there is nothing like literature or society to keep it within limits, two villages, separated only for a few generations, will become mutually unintelligible. This takes place in America, as well as on the borders of China and India; and in the North of Asia, Messerschmidt relates, that the Ostiakes, though really speaking the same language every where, have produced so many words and forms peculiar to each tribe, that even within the limits of twelve or twenty German miles, conversation between them becomes extremely difficult. It must be remembered also, that the dictionary of these languages is small if compared with a Latin or Greek Thesaurus. The conversation of nomadic tribes moves within a narrow circle, and with the great facility of forming new words at random, and the great inducement that a solitary life holds out to invent for the objects which form the world of a shepherd or huntsman, new appellations, — half poetical, perhaps, or satirical, — we can understand how, after a few generations, the dictionary of a nomadic tribe may have gone, as it were, through more than one edition.

There are still a few languages which for the present must remain unclassed, because the means are wanting for subjecting them to a grammatical analysis. Such are the languages of Korea, of the Koriäks, Kamtadales, and of Japan. Their number is small, and in them also some traces of a common origin with the Turanian languages have, it is probable, survived, and await the discovery of philological research.

Other branches of Turanian dialects may have existed in Asia and Europe during times of which we have no records, and previous to the first immigration of Arian and Semitic races. Wherever these

two races arrive, they find the land occupied by barbarians, represented as giants or evil spirits, and speaking languages unintelligible to the new arrivers. They were exterminated, and their languages silenced for ever. Here the links may have been broken and lost which once united the language of Asia and Europe with the scattered dialects of Africa and America. An extension of the Turanian family to these two continents has been hinted at by several scholars. The Greenland language has been pointed out as showing a transition of Turanian into American dialects, and the researches of physical science have clearly indicated the islands east of Siberia, as the only bridge on which the seeds of Asia could have been carried to the New World. As to African dialects, all is still conjecture, except this, that, besides the Semitic type of some African languages, such as the Galla, spoken north of the equator, there is another grammatical character impressed on other idioms, as, for instance, the Hottentot, which, by its mechanical perfection and artificial complication, invites a comparison with the grammatical system of the descendants of Tur.*

What was the state of the Arian and Semitic dialects during this early period of ethnic migration and struggle we do not know. Their history begins only when they cease to belong to the chaotic mass of Turanian Nomads. They appear at once on the stage of history, fully clad in their own armour, the enemies of the barbarians, the worshippers of brighter gods, and with a language which has left for ever the tumult of a Turanian arena. They are Arians, or Shemites, inasmuch as they are no longer Turanians; and though their antecedent growth must have passed through a Turanian phase, this is overcome when they appear as the heralds of a new era in the history of man. It is only after having conquered in themselves Turanianism, in every sense of the word, that they advance through Asia and Europe as the conquerors of the descendants of Tur. This battle is not yet ended; and the largest share of the earth still belongs to its earlier occupants. The Arian and Semitic languages occupy but four peninsulas of the primeval continent, — India, Arabia, Asia Minor, and Europe; all the rest belongs to the family

* See Boyce's Kaffir Grammar, Introduction, page ix.

of Tur. But the countries reclaimed by Shem and Japhet mark the high road of civilisation, and comprehend the stage on which the drama of ancient and modern history has been acted.

Shem was in advance of Japhet; and his first colonies represent a stage of language not yet decidedly Semitic, not yet freed from all Turanian influences, and, hence, less distant also from the stream of Arian speech. These were the colonists of Africa, who have fallen back into nomadic habits, but whose language is still the language of the people in Marocco, Algiers, Tunis, Tripoli, and Fez, wherever it has not been supplanted by the tongue of the conquering Arabs. A second colony, not yet decidedly Semitic, but, owing to political influences, more settled in its grammatical system, took its abode in Egypt. A third made its idiom the language of Babylonia and Assyria.

These three early colonies exhibit the Semitic in its struggle towards grammatical form and consistency; and the individuality of Shem has not yet in them obscured those traces of a common past which enable us to connect the radical elements of the Semitic with the Turanian, and through it with the Arian family.

After these three colonies, the limits of the Semitic speech were drawn more closely together, and the three later branches, the Arabic, Aramaic, and Hebrew, stand before us as cognate descendants of one parent, who has left to each the sharp and decided features of his own expression.

The Arian family has had but one generation of dialects. There was a time when the ancestors of this race formed one family, in the proper sense of the word. Their language was then the idiom of a hamlet, as Latin was at one time spoken by the few adventurers who built their cottages on the hills of the Tiber. Without some such previous concentration, as it is impossible to account for the perpetuation of the most minute and fanciful forms in the Roman dialects of modern Europe, it would be in vain to account for the coincidences between the Arian dialects of the ancient world. The Arian language, which grew, or became nationalised, into Sanscrit, Persian, Greek, Latin, Teutonic, Slavonic, and Celtic, must have been a language richer perhaps than any of its descendants, but a language with such settled principles, and such intense individuality

in grammar and dictionary, that the national, or, as we may here call it, the individual character of its descendants, though widely different as the meditative Hindu and active Greek, could never obliterate or efface the stamp of their common parent.

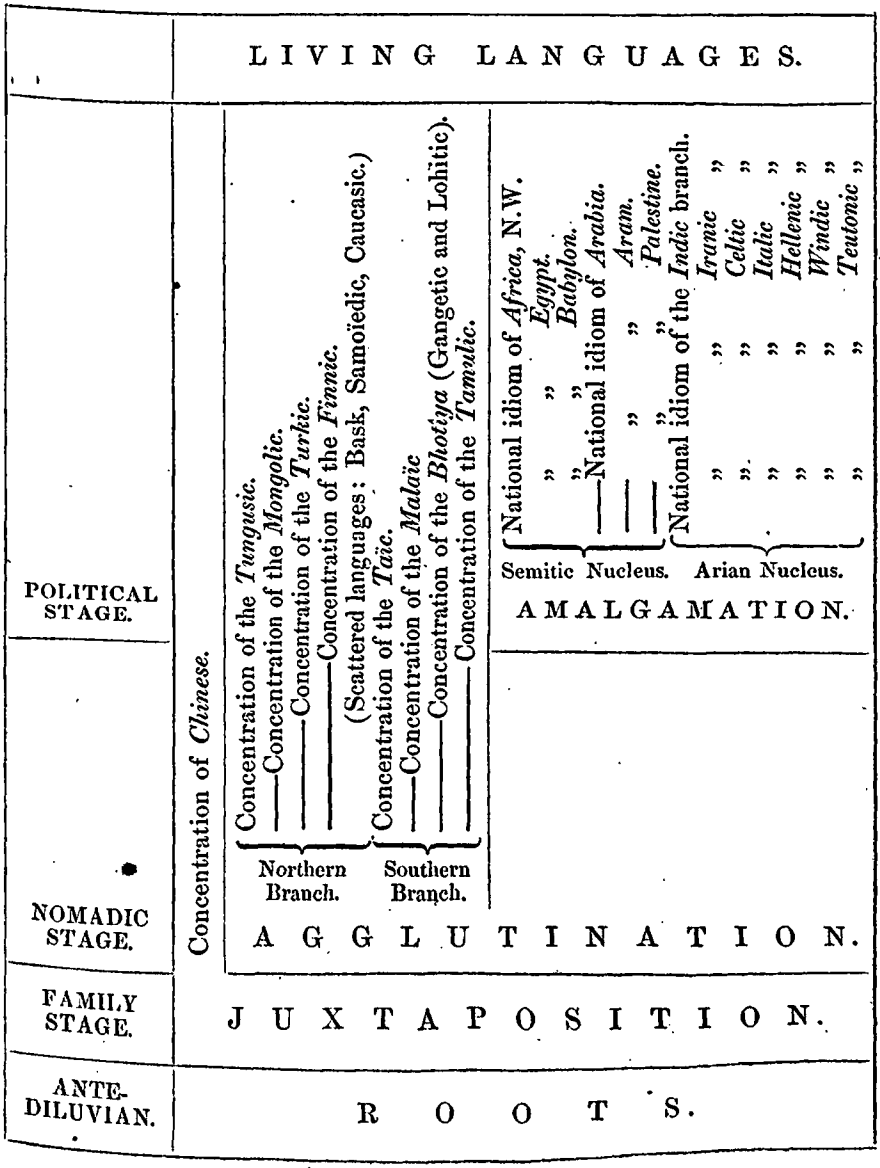
And if now we gaze from our native shores over that vast ocean of human speech, with its waves rolling on from continent to continent, rising under the fresh breezes of the morning of history, and slowly heaving in our own more sultry atmosphere, — with sails gliding over its surface and many an oar ploughing through its surf, and the flags of all nations waving joyously together, —with its rocks and wrecks, its storms and battles, yet reflecting serenely all that is beneath, and above, and around it,—if we gaze, and hearken to the strange sounds rushing past our ears in unbroken strains, it seems no longer a wild tumult, or ἄνηρίθμον γέλασμα, but we feel as if placed within some ancient cathedral, listening to a chorus of innumerable voices; and the more intensely we listen, the more all discords melt away into higher harmonies, till at last we hear but one majestic trichord, or a mighty unison, as at the end of a sacred symphony.

Such visions will float through the study of the grammarian, and in the midst of toilsome researches his heart will suddenly beat, as he feels the conviction growing upon him that men are brethren in the simplest sense of the word — the children of the same father — whatever their country, their colour, their language, and their faith.

MAX MÜLLER.

Note. — Circumstances over which I had no control made it impossible to carry out a uniform system of transcription in the letter on the Turanian Language and in the Tables appended to it.

The Languages of Asia and Europe arranged according to their Grammatical Principles.



FIRST APPENDIX.

COMPARATIVE TABLE OF SUBJECTIVE AND PREDICATIVE COMPOUNDS.

Explanation of Letters.

Capitals are used to represent Verbal bases.
Small Letters to represent Nominal bases.
Greek Letters to represent Pronouns.
A. a. α. to represent a word in the Nominative, or as Subject.
B. b. β. to represent a word in the Casus obliquus, or as Predicate.

For instance:

a. b.=Nominal base as subject, followed by Nominal base as predicate: Hôtel-Dieu.

a. β.=Nominal base as subject, followed by Pronoun as predicate: Hebr. El-i, God (of) I, i.e. my God. (*Different from* fratelmo, i. e. fratellus meus.)

a. B.=Nominal base as subject, followed by Verbal base as predicate. (Possible only if the verbal predicative base becomes an adjective.)

The sign – is used after nominal bases.
The sign . is used after verbal bases.

Cham.	Shem.	Turanian.	
Egypt.	*Palestine.*	*China.*	*India extra Gangem*
I. 1. a. b.	I. 1. a. b.	I 1. a. b.	I. 1. a. b.
si-Ilcs, *son (of) Isis.*	debar-mélek, *word (of a) king.*	No.	No.
	malkí-zedek, *king (of) justice.*		Exc. Tai dialects.
	ben o Be'or, *son he (of) Beor.*		Khamti, hang-pa, *tail (of) fish, a fish's tail;* pa=*fish.*
uskh en nub, *chain (which or where) gold,* i.e. *chain of gold.*	shir (asher lĕ) Shelomoh, *the song (which to) Solomon.*		Kassia, ka.reng-u.blang, *horn (of) goat.*
	Syr. mausa d simō, *chest (where) silver.*		Siamese, kua-khon, *head (of) man.*
	Ethiop. wald a Mâry-âm, *son who (to) Mary.*		Malay, kapala-orang, *head (of) man.*
suten-tef, *king (who or as) father.*	Ethiop. mazmor za Dâwith, *psalm that (of) David* (za=he, *psalm being a masc.*)		Anam, chua-nya, *master (of) house.*
neter-mut, *goddess (who or as) mother,* cf. *queen-mother.*	anqaz enta samây, *the gate (which) heaven* (enta=she, *gate being a fem.*)		
I. 2. a. β.	I. 2. a. β.	I. 2. a. β.	I. 2. a. β.
si-k, *son (of) thee.*	lebush-í, *dress (of) me.*	No.	No.
si-f, *son (of) him.*	lebush-kâ, *dress (of) thee.*		Exc. Khamti, etc., mü-man, *hand (of) him,* i.e. *his hand.*
set-ten *daughter (of) them.* (Coptic, No.)	lebush-âh, *dress (of) her.* (cf. labsh-âh, *she dresses*).		
I. 3. a. B.	I. 3. a. B.	I. 3. a. B.	I. 3. a. B.
neter-naâ, *God-great.*	dâm-nâqí, *blood-innocent.*	No.	No?
			Exc. Khamti, etc., kun-ni, *man good.* kun-mani, *man bad.*
cf. neter-mut, *goddess-mother.* (a.b.)			Miri, ámie-áidá, *man good.*
			Garo, mande-namja ni, *man bad of* (Genit.).
II. 1. A. b.	II. 1. A. b.	II. 1. A. b.	II. 1. A. b.
Never.	Never.	Never.	Never.
II. 2. A. β.	II. 2. A. β.	II. 2. A. β.	II. 2. A. β.
iri. en. a.	qathal.tí, qathal.tâ, qathl. âh, *killing (to) me. thee, her,* i.e. *I killed, thou killedst, she killed.*	No.	No.
iri. en. ek.			Exc. Nâga dialects.
iri. en. ef.			
doing where I, i.e. *doing of me,* i.e. *I did, thou didst, he did.*			
II. 3. A. B.	II. 3. A. B.	I. 3. A. B.	II. 3. A. B.
Never.	Never.	Never.	Never.
III. 1. α. b.	III. 1. α. b.	III. 1. α. b.	III. 1. α. b.
Never.	Never.	Never.	Never.
III. 2. α. β.	III. 2. α. β.	III. 2. α. b.	III. 2. α. β.
Never.	Never.	Never.	Never.
III. 3. α. B.	III. 3. α. B.	III. 3. α. B.	III. 3. α. B.
No.	(α Bα). ni.qthol, ti.qthol. náh, yi.qthl.u, *we killing, you killing* (*fem.*), *they killing.*	No.	No.
(Exc. Coptic, ei iri, ek iri, ef iri, *I, thou, he makes.* cf. Bα.)		(ngò tà, *I strike.*) (ni tà, *thou strike* (*st*)).	

TURANIAN.

Caucasus.

I. 1. a. b.
No.

I. 2. a. β.
No.

I. 3. a. B.
No?
Abchasian and Tscherkessian, apshits-abzia-khwa, *fish good, plur. = good fishes.*

II. 1. A. b.
NEVER.

II. 2. A. β.
No.

II. 3. A. B.
NEVER.

III. 1. a. b.
NEVER.

III. 2. a. β.
NEVER.

III. 3. a. B.
No. (cf. αBα).

Dekhan.

I. 1. a. b.
No.

I. 2. a. β.
No.
? Sontal, apa-t, *his father?*

I. 3. a. B.
No?

II. 1. A. b.
NEVER.

II. 2. A. β.
No.

II. 3. A. B.
NEVER.

III. 1. a. b.
NEVER.

III. 2. a. β.
NEVER.

III. 3. a. B.
No.

Altai.

I. 1. a. b.
No.

I. 2. a. β.
Lapp. atzya-m, atzya-d, atzya-s, *my, thy, his father.*
Hung. atya-m, atya-d, atya, *my, thy, his father.*
Yakute, agha-m, agha-n, agha-ta, *my, thy, his father.*

I. 3. a. B.
No?

II. 1. A. b.
NEVER.

II. 2. A. β.
Hung. Transit. definite. hall.om; hall.od, hall.ja; *hearing (to) me*, i.e. *I heard-(it), thou, he heard.*
Ibid. Preterite indef. var t.am, var t.al, var t, *waiting (to) me; I, thou, he waited.*
Yakute. Perfect, sanâ-t.ĕm, sanâ-t.ĕn, sanât.a, *thinking (to) me; I, thou, he thought.*

II. 3. A. B.
NEVER.

III. 1. a. b.
NEVER.

III. 2. a. β.
NEVER.

III. 3. a. B.
No.

JAPHET.

Indo-European.

I. 1. a. b.
No.
Exc. Pehlevi, kûp i Fars, *mountain (there) Persia*, i.e. *mountain of P.*
Parsi, qârî-Garôthmân, *the splendour (of) Garothman.*
Parsi, vinasn i kasm, *the sight (where) the eye.*
Persian, pusar i dost, *the son (where) the friend, the friend's son.*
Afghan, Sardârân da Candahar, *the Sardars (they) Candahar*, i.e. *of Candahar.*
Cf. Pehlevi-Zend, gâum yim Sugdhô-sa yanem, *regionem (quam) Sugdhæ-situm habuitem.*

I. 2. a. β.
No.
Exc. Persian, din-em *my religion*, din-esh, *thy religion; but not in Parsi, exc. after prepositions, as* az-ash, *from him.*

I. 3. a. B.
No?
Sansk. pita-maha, *father-grand*, i.e. *grandfather.*

II. 1. A. b.
NEVER.

II. 2. A. β.
No.

II. 3. A. B.
NEVER.

III. 1. a. b.
NEVER.

III. 2. a. β.
NEVER.

III. 3. a. B.
No.

Cham.	Shem.	Turanian.	
Egypt.	*Palestine.*	*China.*	*India extra Gangem.*
IV. 1. b. a. No.	IV. 1. b. a. No.	IV. 1. b. a. 1. min-li, *people's power*	IV. 1. b. a. 1. Changlo, kurta-bi, *horse's leg.* Burmese, lu-khaung, *man's head.*
		2. min-ti li, *man-his power.*	2. Genitive Adjectives: Singpho, kansu-nà rung, *a cow's horn* (*a bovinu cornu*). Garo, ambal ni kethali, *a wooden knife.*
IV. 2. b. *a.* Never.	IV. 2. b. *a.* Never.	IV. 2. b. *a.* Never.	IV. 2. b. *a.* Never.
IV. 3. b. A. Never.	IV. 3. b. A. Never.	IV. 3. b. A. Never.	IV. 3. b. A. Never.
V. 1. B. a. No.	V. 1. B. a. No.	V. 1. B. a. pé-mà, *white horse.*	V. 1. B. a. Bhot. khâng-zâng, *house-good, a good house.* zang-mi, *good man.*
V. 2. B. *a.* Present: iri. a. *do. I, I do.* iri. ek. *thou does'.* iri. ef. *he does.* (Coptic. No.)	V. 2. B. *a.* No.	V. 2. B. *a.* No.	V. 2. B. *a.* No. Exc. Nâga. Present, thier.âng, thien.o, thie .a, *put-I*, i.e. *I put, thou puttest, he puts.* Preterite, thien t.ak, thien t.o, thien t.a, *I, thou, he did put.*
V. 3. B. A. Never.	V. 3. B. A. Never.	V. 3. B. A. Never.	V. 3. B. A. Never.
VI. 1. *β.* a. No.	VI. 1. *β.* a. No.	VI. 1. *β.* a. ngo-sin *I-heart*, i.e. *my heart.* 2. ngo-ti sin, *mine heart.*	VI. 1. *β.* a. No. Exc. Nâga, i-lâh, *my kite.* The same in Gyarung and Kiranti. 2. Genitive Adjectives: Kachari, ang-ni nâwa, *mei nomen.* Nâga, irang lâh, *mine kite.*
VI. 2. *β. a.* Never.	VI. 2. *β. a.* Never.	VI. 2. *β. a.* Never.	VI. 2. *β. a.* Never.
VI. 3. *β.* A. No.	VI. 3. *β.* A. No.	VI. 3. *β.* A. No.	VI. 3. *β.* A. No.

TURANIAN.			JAPHET.
Caucasus.	*Dekhan.*	*Altai.*	*Indo-European.*
IV. 1. b. a. Suanian, mare-shiar, *man's hands.* Abchasian, aph-wizba-ala, *girl's dog.*	IV. 1. b. a. Tam. vidu-kkatavu, *house-door.* kal-vari, *stone-road.*	IV. 1. b. a. Lapp. pana-kritjem, *tooth-ache.* Hung. fog-fajas, *tooth-ache.* Yakute, kĕs-usug ar, *winters end in, at the end of winter.* tas. kharakh, *stone-eye (spectacles).*	IV. 1. b. a. Snsk. rága-purusha, *king's man.*
2. Genitive Adjectives.	2. Genitive-Adjectives.	2. Genitive-Adjectives: Mandshu, irgeni amo, *populi pater.*	2. Genitive-Adjectives: Hind. Kudá-kâ betâ, *God's son (divinus filius).* Kudâki mâ, *God's mother (divina mater).* Latin, Dei filius, filius Dei.
IV. 2. b. α. NEVER.	IV. 2. b. α. NEVER.	IV. 2. b. α. NEVER.	IV. 2. b. α. NEVER.
IV. 3. b. A. NEVER.	IV. 3. b. A. NEVER.	IV. 3. b. A. NEVER.	IV. 3. b. A. NEVER.
V. 1. B. a. Suanian, éilader-deas, *daily bread.*	V. 1. B. a.	V. 1. B. a. Lappon. denkewes-almats, *fat man.* Genit. denkewes-almats a, *fat man of.* Hung. kövér-ember, *fat man.* Genit. kövér-emberé, *fat man's.* Turk. altyn-zengirim, *my golden chain.* Gen. altyn-zengirimin, *of my golden chain.*	V. 1. B. a. Sanskrt. mahâ-deva, *Great-god.* (cf. mahâmas, *magnify we.*) Gen. mahâ-devasya, *Great-god's.* Greek, ἑλκε-χίτων. ἑλκεσί-πεπλος. Anglo-Sax. sin-grêne, *Ever-green.* Ohg. sin-fluot, *great flood, Deluge.*
V. 2. B. α. αBα. Lazian, Present, b chask.a, chask.a, chask.as, b chask.at, chask.at, chask.an, *I dig I,* i.e. *I dig; dig thou,* i.e. *thou diggest; he, we, you, they dig.*	V. 2. B. α. Telugu, vaguta-nu, vaguta-vu, vaguta-du, vaguta-mu, vaguta-ru, vaguta-ru, *speaking-I,* i.e. *I speak; thou, he, we, you, they speak.*	V. 2. B. α. Hung. Present intrans. hall.ok, hall.asz, hall, *hearing-I,* i.e. *I am hearing; thou, he hears.* Yakute, sani.bin, sani.gin, sanâr, *knowing-I,* i.e. *I know; thou, he knows.*	V. 2. B. α. Snsk. Perfect. Atm. (+â) dad.e, dadi.she, dad.e, dadi.mahe, dadi.dhve, dadi re. Present, dad.e, dat.se, dat.te, dad.mahe, dad.dhve, dada.te, *taking-I,* i.e. *I take, and (continue to) take.* Greek, Perf. Pass. δέδο.μαι, δέδο.σαι, δέδο.ται. Pres. Pass. δίδο.μαι, δίδο.σαι, δίδο.ται.
V. 3. B. A. NEVER.	V. 3. B. A. NEVER.	V. 3. B. A. NEVER.	V. 3. B. A. NEVER.
VI. 1. β. a. Suanian. s-ab, w-ab, i-ab, h-ab, sh-ab, r-ab, *my, thy, his, our, your, their father.*	VI. 1. β. a. Telugu, na-tandri, *my father.* Uraon, im-bas, *my father.*	VI. 1 β. a. No. (βαβ) Syr. tead-mori tâ, *thine man of thee.*	VI. 1. β. a. Snsk. mat-putra, trat-putra, tat-putra, *my, thy, his son.*
2. Genitive Adjectives: Lazian, shkimi ili, *my spear.* Suanian, mishgwa mu, *meus pater.*	2. Genitive Adjectives.	2. Genitive Adjectives: Mandshu, mi-ni amo, *mei pater.* miningge, *meus.*	2. Genitive Adjectives: Asmâ-kam pitâ or ásmâ-kah pitâ, *our father.* πατήρ σου, σός πατήρ.
VI. 2. β. α. NEVER.	VI. 2. β. α. NEVER.	VI. 2. β. α. NEVER.	VI. 2. β. α. NEVER.
VI. 3. β. A. Lazian, ma ma-zun, si ga-zun, himuz a-zun+ asere, *my-ailing,* i.e. *I ailed; thou, he ailed.*	VI. 3. β. A. No.	VI. 3. β. A. N	VI. 3. β. A. Snsk. βAβ. Preterite: [m]a lip.am, [s]a lip.as, [t]a lip.at, *my writing,* i.e. *I wrote, thou, he wrote.*

SECOND

COMPARATIVE TABLE OF PERSONAL PRONOUNS, ATTACHED TO

Note. — □, Nominal base.

	SINGULAR.					
	First Person.	*Second Person.*		*Third Person.*		
		M.	F.	M.	F.
1. EGYPTIAN.						
Nominative. a	nuk. anuk.	entek.	enta.	entuf.	entes.
Status subjectivus. b [present]	√a. (*the same as* d)	√ek.	√et.	√ef.	√es.
Casus obliquus. c	n.a(n.u) (*where I*, i.e. *of me*)	n.ek.		n.ef.	n.es.
Status prædicativus. d					
1. cum nom. [possessive]	□n.(u) (*the same as* b)	□ek.	□et.	□ef.(-se.)	□es.
2. cum verb. [preterite]	√en.a. (en.u.) *the same as* c.	√en.ek.	√en.et.	√en.ef.	√en.es.
2. HEBREW.					
Nominative. a	ánoki. ani.	atâh.	at(ati).	hu.	hi.
Status subjectivus. b [present]	ć√.	ti√.	ti√i.	yi√.	ti√.
Casus obliquus. c	—	—	—	—	—
Status prædicativus.					
1. cum nom. [possessive]	□i.	□kâ.	□ć̀k.	□o.	□âh.
2. cum verb. [preterite]	√ti. (Ethiop. ku.)	√tâ.	√t.(kâ.)	√.	√âh.
3. SANSKRIT.					
Nominative. a	aham.	tvam.		svayam. sa, sâ, tad.	
Status subjectivus. b [present]	√mi,	√si.		√ti.	
Casus obliquus. c	{ mama. (mâmakas.) { me. (madiyas.)	tava. (tâvakas.) te. (tvadiyas.)		sve. (svas, svakas.) tasya. (tadiyas.)	
Status prædicativus. d					
1. cum nom. [possessive]	mad □.	tvad □.		sva □, tad □.	
2. cum verbis. [preterite]	-'√m.	-'√s.		-'√t.	
4. GREEK.					
Nominative. a	ἐγώ.	σύ.		ἵ. (σφί.) ὁ, ἡ, τό.	
Status subjectivus. b [present]	√μι.	√σι.		√τι.	
Casus obliquus. c	ἐμεῦ. (ἐμός.)	σεῦ(σός.)		οὗ. (σφός.)	
Status prædicativus. d cum verbis [preterite]	-'√ν.	-'√ς.		-'√(τ.)	
5. LATIN.					
Nominative. a	ego.	tu.		ipse. hic, hæc, hoc.	
Status subjectivus. b [present]	√o.	√s.		√t.	
Casus obliquus c	mei. (meus.)	tui. (tuus.)		tui. (suus.) hujus.	
Status prædicativus. d cum verbis [preterite]	√m.	√s.		√t.	
6. GOTHIC.					
Nominative. a	ik.	thu.		silba. sa, sô, thata.	
Status subjectivus. b [present]	√o.	√s.		√th.	
Casus obliquus.	meina. (meins.)	theina. (theins.)		seina. (seins.) this.	
Status prædicativus. cum verbis [preterite] de. st.					

APPENDIX.

AND OF PRONOMINAL PREFIXES AND AFFIXES NOUNS AND VERBS.

√, Verbal base.

PLURAL.				
First Person.	*Second Person.* M. F.	*Third Person.* M. F.	*Sign of Genitive & Adjective.*	*Plural.*
— √en.	emtuten. √ten. eututen.	entesen. √sen. sen.		-n.
(n.en.)	ne.ten.	na.u.	ne-, *the Egyptian pron. demonst. and relat.; Of.*	
□en. √en.en.	□ten. √en.ten.	□sen. √en.sen.		
anakhnu. (nakhnu.) ni√. —	atem. ti√u. atèn. (atènáh.) ti√náh.	hèm(hèmáh.) yi√u. hèn(hènáh.) ti√náh.		-n.
—	— —	— —		
□énu. √nu.	□kem. √tem(Eth. kemmu) □ken. √ten.	□âm. √û. □ân.		
vayam. -√mas.	yûyam. √vas.	svayam tè, tás, táni. √nti.		-s.-i.
asmákam. (ásmákas.) nas. (asmadiyas.)	yushmákam. (yaushmákas.) vas. (yushmadiyas.)	sve. (svas. svakas.) tèshâm. (tadiyas.)	-s.-kas. -iyas.	
asmad □. -√ma.	yushmad □. -'√ta.	sva □. tad □. -'√n.		
ἡμεις. √μεν.	ὑμεῖς. √τε.	σφεῖς. √ντι. οἱ, αἱ, τά.		
ἡμῶν. (ἡμέτερος.) '√μεν.	ὑμῶν. (ὑμέτερος.) -'√τε.	σφῶν. (σφέτερος.) -'√ν.	-ς.-τερος.	-ς.-ι.
nos. √mus.	vos. √tis.	ipsi. √nt. hi, hæ, hæ.		-s.-
nostri. (noster.) √mus.	vestri. (vester.) √tis.	ipsorum. √nt. horum.	-us.-ter.	
veis. √m.	jus. √th.	silbai. √nd. thai, thôs, tha.		-s.-i.
unsara. (unsar.)	izvara. (izvar.)	silbônô. thizê.	-na.-ar.	

	Singular.		
	First Person.	*Second Person.*	*Third Person.*
7. CHINESE (Kuanhoa).			
Nominative. a	ngo. (tsa.)	ni.	t'a.
Status subjectivus. b	ngo√.	ni√.	t'a√.
Casus obliquus. c.	ngo-ti.	ni-ti.	t'a-ti.
Status prædicativus. d.	ngo □.	ni □.	t'a □.
8. GYAMI.			
Nominative. a	gno.	ni.	tha.
Status subjectivus. b	gno√.	ni√.	tha√.
Casus obliquus. c	gno-ti.	ni-ti.	tha-ti.
Status prædicativus. d	gno □.	ni □.	tha □.
9. TAI (Siamese).			
Nominative. a.	kha.	tua. (müng.)	khon. (man.)
Status subjectivus. b	kha √.	tua√.	khon√.
Casus obliquus. c	khang-kha.	khang-tua.	khang-khon.
Status prædicativus. d	□khang-kha.	□khang-tua.	□khang-khon
10. TAI (Laos).			
Nominative. a	ong (ku)	tva.	tan. (man)
Status subjectivus. b			
Casus obliquus. c			
Status prædicativus. d			
11. TAI (Ahom).			
Nominative. a	kau.	mo.	heu.
Status subjectivus. b.	kau√.	mo√.	heu√.
Casus obliquus. c			
Status prædicativus. d			
12. TAI (Khamti).			
Nominative. a	kau.	maü.	man.
Status subjectivus. b.	kau√.	maü√.	man√.
Casus obliquus. c	kau.	maü.	man.
Status prædicativus. d	□kau. hang-man, *tail (of) her.* hang-pa, *tail (of) fish.*	□maü.	□man.
13. TAI (Kassia).			M. F.
Nominative. a	nga	me. (pha.)	u. kâ.
Status subjectivus. b	nga√.	me√.	u√. kâ√.
Casus obliquus. c	jong-nga.	jong-me.	jong-u. jong-kâ.
Status prædicativus. d	□jong-nga. ukapa jông ngi, *father of us.* kakarteng jong umon, *the name of the man.*	□jong-me.	□jong-u. □jong-kâ.
14. CHINESE (Kuwon).			
Nominative. a	ngo.	g'hou.	khi.
Status subjectivus. b	ngo√.	g'hou√.	khi√.
Casus obliquus. c	ng-o-tei.	g'hou-tei.	khi-tei.
Status prædicativus. d	ngo □.	g'hou □.	khi □.
15. TRANS-HIMALAYAN (Tibetan spoken).			
Nominative. a	gnya.	khye.	khu.
Status subjectivus. b	gnya√.	khye√.	khu√.
Casus obliquus. c	gna.	khe-yi.	kho-yi.
Status prædicativus. d	gna □.	khe-yi □.	kho-yi □
16. TRANS-HIMALAYAN (Horpa).			
Nominative. a	gna.	ni.	jya.
Status subjectivus. b			
Casus obliquus. c	gna-á.	ni-á.	jya-a.
Status prædicativus. d			

	PLURAL.			
First Person.	*Second Person.*	*Third Person.*	*Sign of Genitive & Adjective.*	*Plural.*
ngo-men. (tsa-men.)	ni-men.	t'a-men.		-men. (pel.)
ngo-men√.	ni-men√.	t'a-men√.		(nei.)
ngo-men-ti.	ni-men-ti.	t'a-men-ti.	-ti.	
ngo-men □.	ni-men □.	t'a-men □.		
gno-me.	ni-me.	tha-me.		-me.
gno-me√.	ni-me√.	tha-me√.		
gno-me-ti.	ni-me-ti.	tha-me-ti.	-ti.	
gno-me □.	ni-me □.	tha-me □.		
rau.	su.	khau-arai.		-arai.
rau√.	su√.	khau-arai√.		
khang-rau.	khang-su.	khang-khau-arai.	khang-.	
□khang-rau.	□khang-su.	□khang-khau-arai.		
hau.				
rau.	khau.	khreu.		
rau√.	khau√.	khreu√.		
hau.	mau-su.	man-khau.		-su.
hau√.	mau-su√.	man-khau√.		-khau.
hau.	man-su.	man-khau.		
□hau.	□mau-su.	□man-khau.		
ngi.	phi.	ki.		
ngi√.	phi√.	ki√.		
jong-ngi.	jong-phi.	jong-ki.	jong-.	
□jong-ngi.	□jong-phi.	□jong-ki.		
ngo-shu.	g'hou-shu.	khi-shu.		-shu. (tchai.) (teng.)
ngo-shu√.	g'hou-shu√.	khi-shu√.		
ngo-shu-tci.	g'hou-shu-tci.	khi-shu-tci.	-tci.	
ngo-shu □.	g'hou-shu □.	khi-shu □.		
gnan-jo.	khen-jo.	kon-jo.		-jo. (nam.) (dag.) (chag.)
gnan-jo√.	khen-jo√.	kon-jo√.		
gnan-jo-yi.	khen-jo-yi.	khon-jo-yi.	-yi.	
gnan-jo-yi □.	khen-jo-yi □.	khon-jo-yi □.		
gna-ni (gna-riggi).	ni-ni (riggi).	ji-ni (ji-riggi).		-ni. -riggi.
gna-n-rigya.	ni-rigya.	ja-n-rigya.	Elongation.	

	Singular.		
17. TRANS-HIMALAYAN (Thochu).	*First Person.*	*Second Person.*	*Third Person.*
Nominative. a	chi. (ka.)	kwa.	tha-cha.
Status subjectivus. b			
Casus obliquus. c	ka-kchi.	kwe-kchi.	tha-kchi. (kwana-kchi.)
Status prædicativus. d			
18. TRANS-HIMALAYAN (Gyarung).			
Nominative. a	gna.	nan re.	gnapos. (watu.)
Status subjectivus. b		na√. (J. A. S. B., 1853, p. 29.)	
Casus obliquus. c			
Status prædicativus. d	gna□.	ni □.	wa□.
19. TRANS-HIMALAYAN (Manyak).			
Nominative. a	a.	no.	thi.
Status objectivus. b			
Casus obliquus. c	a-i.	no-i.	thi-i.
Status prædicativus. d			
20. TRANS-HIMALAYAN (Takpa).			
Nominative. a	gne. (nye.)	i.	pe.
Status subjectivus. b.			
Casus obliquus. c	gne-ku.	i-ku.	pe-ku.
Status prædicativus. d			
BHOTIYA.			
21. SUB-HIMALAYAN (Kenaveri).			
Nominative. a	gna. (gnarung).	keot. (kherung.)	phaï; te; khong.
Status subjectivus. b	gna√ung.	keot√ uk.	phaï√ ung.
Casus obliquus. c	gnarung-i.	keot-ki.	te.
Status prædicativus. d	gnarung□.	kherung □.	phaï □.
22. SUB-HIMALAYAN (Serpa).			
Nominative. a	gna.	khyo.	khwo.
Status subjectivus. b	gna√.	khyo√.	khwo√.
Casus obliquus. c.	gna-ti.	khyo-ti.	khwo-ti.
Status prædicativus. d			
23. SUB-HIMALAYAN (Sunwar).			
Nominative. a	go.	gai.	hari.
Status subjectivus. b	go√.	gai√.	hari√.
Casus obliquus. c.	a-ke.	i-ke.	harea-ke.
Status prædicativus. d	a-ke □.	i-ke □.	harea-ke □.
24. SUB-HIMALAYAN (Gurung).			
Nominative. a	gna.	ken.	thi.
Status subjectivus. b	gna√.	ken√.	thi√.
Casus obliquus. c	gna-la.	ken-la.	thi-la.
Status prædicativus. d	gna-la □.	ken-la □.	thi-la □.
25. SUB-HIMALAYAN (Magar).			
Nominative. a	gna.	nang.	hos.
Status subjectivus. b	gna√.	nang√.	hos√.
Casus obliquus. c	gnou.	nuwo.	hochu.
Status prædicativus. d	gnou □.	nuwo □.	hochu □.
26. SUB-HIMALAYAN (Newar).			
Nominative. a	ji.	chha.	wo.
Status subjectivus. b	ji√.	chha√.	wo√.
	M. & P. N.		
Casus obliquus. c	jimho ji-gu	chhang-gu.	waya-gu.
Status prædicativus. d	jimho □. ji-gu □.	chhang-gu □.	waya-gu □.

PLURAL.			*Sign of Genitive & Adjective.*	*Plural.*
First Person.	*Second Person.*	*Third Person.*		
chi-ki. (cha-klar.)	kweni-ko (kwani-klar).	tha-ko. (tha-klar.)		-ki. -klar.
chi-kuk.	kwani-kuk.	tha-kuk.	-kchi. -uk.	
yo.	nyo.	yapos.		
a-dur.	non-dur.	thi-dur.		-dur.
a-dur-i	non-dur-i.	thi-dur-i.	-i.	
gna-ra.	i-ra.	pe-ra.		-ra.
gna-ra-ku.	i-ra-ku.	pe-ra-ku.	-ku.	
net. (gna-tamshe.)	keozhuk.(kherung-tamshe.)	wateshe. (phai-tamshe.)		-tamshe.
net√ ung.	keozhuk√ ung.	wateshe√ ung.		
gnaring-i.	khering-i.	te.		
gnaring □.	kherung □.	wateshe □.	-ki.-i.	
ni-rang.	khyo-rang.	khwo-rang.		-rang.
ni-rang√.	khyo-rang√.	khwo-rang√.		
ni-ra-ti.	khye-ra-ti.	khwo-ra-ti.	-ti.	
go-vki.	gai-vki.	hare-vki.		-vki.
go-vki√.	gai-vki√.	hare-vki√.		
go ain-ke.	gai-ain-ke.	hari-ain-ke.	-ke.	
go-ain-ke □.	gai-ain-ke □.	hari-ain-ke □.		
gni-mo.	ken-mo.	thi-mo.		-mo.
gni-mo√.	ken-mo√.	thi-mo√.		
gni-mo-lo	keme-mo-lo?	tha-me-la.		
gni-mo-lo □.	keme-mo-lo □.	tha-me-la □.	-la.	
kan-kurik.	nang-kurik.	hos-kurik.		-kurik.
kan-kurik√.	nang-kurik√.	hos-kurik√.		
kan-kurik-um.	nang-kurik-um.	a-kurik-um.	-u.	
kan-kurik-um □.	nang-kurik-um □.	a-kurik-um □.	-um.	
ji-ping.	chha-ping.	wo ping.		-ping
ji-ping√.	chha-ping√.	wo ping√.		
ji-ping-gu.	chha-ping-gu.	wo-ping-gu.	gu.	
ji-ping-gu □.	chha-ping-gu □.	wo-ping-gu □.		

	Singular.		
27. SUB-HIMALAYAN (Murmi).	*First Person.*	*Second Person.*	*Third Person.*
Nominative. a	gna.	'ai.	the
Status subjectivus. b	gna√.	'ai√.	the√.
Casus obliquus. c	gna-la.	'ai-la.	the-la.
Status prædicativus. d	gna-la □.	'ai-la □.	the-la □.
28. SUB-HIMALAYAN (Limbu).			
Nominative. a	inga. (eruga. C.)	khene.	khune.
Status subjectivus. b	inga√.	khene√.	khune√.
Casus obliquus. c	inga-in.	khene-in.	khune-in.
Status prædicativus. d	inga-in □. (also as abbreviated prefix, J. A. S. B., 1853, p. 28.)	khene-in □.	khune-in □.
29. SUB-HIMALAYAN (Kiranti).			
Nominative. a	anka.	khana.	moko.
Status subjectivus. b	anka√.	khana√.	moko√.
Casus obliquus. c.	angko.	amko.	moso.
Status prædicativus. d	angko □. (also as abbreviated prefix, J. A. S. B., 1853, pp. 28. 32. am-pa, *my father.*)	amko □.	moso □.
30. SUB-HIMALAYAN (Lepcha).			
Nominative. a	go.	hau.	he.
Status subjectivus. b	go√.	hau√.	he√.
Casus obliquus. c	kaseusa.	hadosa.	heu-sa.
Status prædicativus. d	kaseusa □.	hadosa □.	heu-sa □.
31. SUB-HIMALAYAN (Bhutanese).			
Nominative. a	gna.	chhu.	kho.
Status subjectivus. b	gna√.	chhu√.	kho√.
Casus obliquus. c	gne-yi.	chhe-gi.	kheu-gi.
Status prædicativus. d	gne-yi □.	chhe-gi □.	kneu gi □.
32. LOHITIC (Burmese spoken).			
Nominative. a	nga (*superior*).	meng (*equal*); men (*inferior*); then.	thu; i (is); thi (hic).
Status subjectivus. b	nga√.	*the same.*	
Casus obliquus. c	nga-i (ngaha).	men-i.	thu-i.
Status prædicativus. d	ngai □.	*the same.*	
33. LOHITIC (Dhimal).			
Nominative. a	ka.	na.	wa.
Status subjectivus. b	ka√.		
Casus obliquus. c	ka-ng.	na-ng.	wa-ng.
Status prædicativus. d	ka-ng □.		
34. LOHITIC (Kachari-Bodo).			
Nominative. a	ang.	nang.	bi.
Status subjectivus. b	ang√.		
Casus obliquus. c	ang-ni.	nang-ni.	bi-ni.
Status prædicativus. d	ang-ni □.		
35. LOHITIC (Garo).			
Nominative. a	ang (anga. Rob.)	nang. (naa. R.)	u. (ua. R.)
Status subjectivus. b	ang√.		
Casus obliquus. c	ang-ni.	nang-ni.	u-ni. (ua-ni. R.)
Status prædicativus. d	ang-ni □.		

	PLURAL.			
First Person.	*Second Person.*	*Third Person.*	*Sign of Genitive & Adjective.*	*Plural.*
gna-ni.	ai-ni.	the-ni.		-nk
gna-ni✓.	ai-ni✓.	the-ni✓.		
in-na.	an-na.	then-na.	-la. na.	
in-na □.	an-na □.	then-na □.		
				-chi.
ani-ge.	khen-ih'.	khun-chi.		
ani-ge✓.	khen-ih'✓.	khun-chi✓.		
ani-gen-in.	khen-ih-in.	khun-chi-in.	-in.	
ani-gen-in □.	khen-ih-in □.	khun-chi-in □.		
				-nin.chi.
anka-n.	khana-nin.	moko-chi.		
anka-n✓.	khana-nin✓.	moko-chi✓.		
ainko.	amno.	myaucho. moyoso.	-so. -o.	
ainko □.	amno □.	myaucho □.		
				-yu.
ka-yu (ká)	ha-yu.	ho-yu.		
ka-yu✓.	ha-yu✓.	ho-yu✓.		
ka-yu pong-sa.	ha-yu pong-sa.	ho-yu pong-sa.	-sa.	
ka-yu pong-sa □.	ha-yu pong-sa □.	ho-yu pong-sa □.		
				-cha.
gna-cha.	kha-cha.	khong.		
gna-cha✓.	kha-cha✓.	khong✓.		
gna-che-gi.	khou che-gi.	khong-gi.	-gi.	
gna-che-gi □.	kheu che-gi □.	khong-gi □.		
nga-do.	men-do.	thu-do.		-do.
nga-do-i.	men-do-i.	thu-do-i.	-i.	
ky-el.	ny-el.	ub-al.		-al.
ki-ng.	ni-ng.	ub-al-ko.	-ng. -ko.	
jang (jang-phur).	nang-chur.	bi-chur.		-chur.
jang-ni.	nang-chur-ni.	bi-chur-ni.	-ni.	
ning. (chinga. R.)	nanok. (na-si-mong. R.)	wonok. (ua-madang. R.)		-nk. -madang simong
ning-ni. (ching-ni. R.)	nanok-ni. (na-si-mong-ni. R.)	wonok-ni. (ua-madang-ni. R.)	-ni.	

	Singular.		
	First Person.	*Second Person.*	*Third Person.*
36. LOHITIC (Changlo).			
Nominative. a	jang.	nan.	dan.
Status subjectivus. b	jang√.		
Casus obliquus. c	jang-ga.	nang-ga.	dan-ga.
Status prædicativus. d	jang-ga □.		
37. LOHITIC (Mikir).			
Nominative. a	ne.	nang.	alang.
Status subjectivus. b	ne√.		
Casus obliquus. c	ne-ne.	nang-ne.	
Status prædicativus. d	ne-□. (oi-ali, *bird's nest;* ne-sal, *my work.*)		
38. LOHITIC (Dophlas).			
Nominative. a	ngo.	no.	ma.
Status subjectivus. b	ngo√.		
Casus obliquus. c	ngo-g.	no-g.	ma-g.
Status prædicativus. d	ngo-g □.		
39. LOHITIC (Abor-Miri). Miri (Robertson).			M. P.
Nominative. a	ngo.	no (na).	bu (bü). no.
Status subjectivus. b	ngo√.		
Casus obliquus. c	ngo-ke. (ngog. R.)	no-kke. (no-g. R.)	bu-kke. (bü-g. R.)
Status subjectivus. d	ngo-ke □.		
40. LOHITIC (Sibsagor-Miri). Abor (Robertson).			
Nominative. a	ngo.	no.	bu. (bü. R.)
Status subjectivus. b	ngo√.		
Casus obliquus. c.	ngo-kke.	no-kke.	bü-kke.
Status prædicativus. d	ngo-kke □.		
41. LOHITIC (Singpho).			
Nominative. a	ngai.	nang (ni).	khi.
Status subjectivus. b	ngai√.		
Casus obliquus. c	nge-na.	na-na.	khi-na.
Status prædicativus. d	nge-na □.		
42. LOHITIC (Mithan-Nâga, &c.)			
Nominative. a	ku (tau ; ni ; a).	nang (no).	mih. (taupa ; pau ; me.)
Status subjectivus. b			
Casus obliquus. c	kukuhe (tesei ; ni).	nang.	
Status prædicativus. d			
43. LOHITIC (Namsang-Nâga).			
Nominative. a	nga.	nang.	ate.
Status subjectivus. b	√ang.	√o.	√a. (e).
Casus obliquus. c	nga-nang (irang).	nang-nang (ma-rang).	ati-eng (a-rang).
Status prædicativus. d	i □.	ma □.	a □.
44. LOHITIC (Khyeng).			
Nominative. a	kyi.	nang.	ni.
Status subjectivus. b			
Casus obliquus. c	ki-ko.	nang-ko.	ni-ko.
Status prædicativus. d			

PLURAL.				
First Person.	*Second Person.*	*Third Person.*	*Sign of Genitive & Adjective.*	*Plural.*
jang-thamche.	nan-thamche.	dan-thamche.		thamche
jang-thamche-ga.	nan-thamche-ga.	dan-thamche-ga.	-ga.	
a-li.	na-li.	ana-li.		-li.
			-ne.	
ngo-lu.	no-lu.	ma-lu.		-lu.
ngo-lu-g.	no-lu-g.	ma-lu-g.	-g.	
ngo-lu.	no-lu.	bü-lu.		-lu.
ngo-lu-ke.(ngo-lu-g.R.)	no-lu-ke. (no-lu-g. R.)	bu-lü-ke. (bü-lu-g. R.)	-ke. -g.	
ngo-sin.	no-lü-sin.	ü-llü. bü-lü.		-lu. -sin.
ngo-lü-kke.	no-lu-kko.	bü-lü-kko.	-ke.	
i.	ni-theng.	khi-ni.		-theng.
			-na.	-ni.
a-kau (a-we).	ni-khala (notoleli).	tung-khala (tothote).		-khala. -we.
ni-ma.	ne-ma.	se-ning.		-ma.
ni-ma-nang.	ne-ma-nang	se-ning-nang.	-nang. -rang.	-ning.
kin-ni.	nang-ni.	ni-di (ni-li).		-ni.
ki-ni-ko,	nang-ni-ko.	ni-di-ko.	-ko.	-di.

	Singular.		
45. LOHITIC (Kami).	*First Person.*	*Second Person.*	*Third Person.*
Nominative. a	ka-i,	nan.	hana-i
Status subjectivus. b			
Casus obliquus. c	ka-i-un.	nan-un.	hana-i-un.
Status prædicativus. d			
46. LOHITIC (Tunglhu).			
Nominative. a	khwa.	na.	wa.
Status subjectivus. b			
Casus obliquus. c			
Status prædicativus. d			
47. MUNDA. Ho. (Tickell. A. S. B. ix.)			
Nominative. a	áing (ing).	um.	aÿ (nyo). (ni, ini, *this*).
Status subjectivus. b	áing√; or, áing√áing.		
Casus obliquus. c	áingia (ing-a).	umm-a.	aÿ-a.
Status prædicativus. d	áingia □; or abbreviated prefix? (J. A. S. B., 1853, p. 28.)		
48. MUNDA (Sinhbhum-Kol).			
Nominative. a	aing.	um.	ini.
Status subjectivus. b			
Casus obliquus. c	iyan.	umma.	ini.
Status prædicativus. d			
49. MUNDA (Sontal-Kol).			
Nominative. a	inge.	umge.	uni.
Status subjectivus. b			
Casus obliquus. c	ingrea.	ami.	unea.
Status prædicativus. d			□t. apa-t, *his father.* (J. A. S. B. 1853, p. 75.)
50. MUNDA (Bhumij-Kol).			
Nominative. a	ing.	am.	ini.
Status subjectivus. b			
Casus obliquus. c	inya.	umma.	aige.
Status prædicativus. d			
51. MUNDA (Mundala-Kol).			
Nominative. a	ing.	am.	inni.
Status subjectivus. b			
Casus obliquus. c	jhatana.	am-atana.	anner-atana.
Status prædicativus. d			
52. TAMULIC (Canarese).			M. F. N.
Nominative. a	nânu (yân, yên).	ntu (ni).	avanu, avalu, adu.
Status subjectivus. b	√ène. Present.	√i.	
	√ênu. Preter., Fut. & Neg.	√i.	√âne. √âlĕ. √ade.
	√ênu. Second future.	√i., lye.	√ânu. √âlu. √ltu.
Casus obliquus. c	nâuna.	uinna.	√ânu. √âlu. √ltu.
Status prædicativus. d	nân □.	nin. □	avana. avala. adera.
53. TAMULIC (Tamil).			
Nominative. a	nân (yân).	ni (un).	ivan. ival. idu.
Status subjectivus. b	√en.	√ây.	√ân. √âl. √adu.
Casus obliquus. c	en-adu (*mei*, enn-udeiya, *meus*).	un-adu (nin-adu).	ivan-adu.
Status prædicativus. d	en □.	un □.	

	PLURAL.			
First Person.	*Second Person.*	*Third Person.*	*Sign of Genitive & Adjective.*	*Plural*
ka-chi.	nan-chi.	hun-na (hani-chi).		-chi.
ka-chi-un.	nan-chi-un.	hani-chi-un.	-un.	
ne.	na-the.	wa-the.		-the.
allo.	appe.	a-ko.		-ko.
allé-a.	appé-a.	ako-a.	-a.	
allo-a.	appe-a.	en-ko-a.	-a.	-ko.
alloa.	appe.	un-kure.		-kur.
abŭsaban.			-a.	
			-a.	
allego.	inkoghi.	an-ko.		-ko.
ahu-atana.	api-atana.	anko-atana.	-atana.	
nâvu (nâm, èm).	nivu (nir, ir).	M. F. N. ăvaru. ăvu.	-a.	-ru. -m. -vu. -gal.
√ève.	√iri.	√âre. √ăve.		
√évu.	√iri.	√ăru. √ăvu.		
√èvu.	√iri.	√âru. √âvu.		
nămma.	nimma.	avara. avugala.		
nam □.	nim □.			
nâm (nàn-gal).	nir (nin-gal).	ivar (ivar-gal) ivei-gal.		-m.
√èm.	√ir-gal.	√ar-gal. (m. f.) √ana. (n).		-r.
nam-adu (en-gal).	um-adu (un-gal).	ivar-adu (ivar-gal-udeiya).	-adu. (*id.*) -udeiya.	-gal.
nam □.	um □.		(udei, *proprium.*)	

	Singular.		
	First Person.	*Second Person.*	*Third Person.*
54. TAMULIC (Telugu).			
Nominative. a	nênu.	nivu.	vâdu. adi.
Status subjectivus. b	√nu.	√vu.	√du. √di.
Casus obliquus. c	nâ-yokka.	ni-yokka.	vâni. dâni.
Status prædicativus. d	nâ □	ni □.	
55. TAMULIC (Malabar).			
Nominative. a	nan (yan).	ni (nir).	avan. aval. aithu.
Status subjectivus. b			
Casus obliquus. c	enn-udeyathu, en-athu.	umm-udiathu, um-athu.	avan-udeyathu.
Status prædicativus. d			
56. TAMULIC (Malayalim).			
Nominative. a	gnân.	nî.	avan. aval. ada.
Status subjectivus. b	gaân√.	ni√.	
Casus obliquus. c	en-re.	nin-re.	avan-re.
Status prædicativus. d	ini-kulla □.		
	Dative+ulla.	nani-kulla □.	avanna+ulla □.
57. TAMULIC (Gond).			
Nominative. a	nauna (nak).	imma.	wur, ad.
Status subjectivus. b	√an.	√i.	√ur.
Casus obliquus. c	no-wa.	ni-wa.	wunna.
Status prædicativus. d	no-wa □.		
58. TAMULIC (Brahvi ?).			
Nominative. a	i.	nî.	o(od);(dâdad); e(ed)
Status subjectivus. b	√t (ta), √v (va).	√s (sa).	√k.
Casus obliquus. c	kanâ.	nâ.	o-nâ. dâ-nâ. e-nâ.
Status prædicativus. d	kanâ □.		
59. TAMULIC (Curgi and Todava).			
Nominative. a	nan, one. (T)	nin. ni. (T)	av. ad. (T)
Status subjectivus. b			
Casus obliquus. c	en-na, en-na. (T)	nin-na. nin-na.(T)	ava-na. ada-na. (T)
Status prædicativus. d			
60. TAMULIC (Uráon-Kol).			
Nominative. a	enan.	nien.	asan.
Status subjectivus. b			
Casus obliquus. c	en-ghi.	nien-ghi.	as-ghi.
Status prædicativus. d.	im □. (im-bas, *my father*, J. A. S. B. 1853, p. 32.; ing-kos, *my child*).		
61. TAMULIC Rajmahâli-Kol).			
Nominative. a	en	nin.	ath.
Status subjectivus. b			
Casus subjectivus. c	ong-ki.	ing-ki.	ahi-ki.
Status prædicativus. d			
62. UGRIC (Finnish).			
Nominative. a	minä (mie. ma. mä.)	sinae (sie. sa. sä.)	hän (se ?)
Status subjectivus. b	√n (ni).	√t (s).	√.(hn).[√pi,√wi].
Casus obliquus. c			
Status prædicativus. d	□ ni.	□ si.	□ nsa. □ sa.

PLURAL.					
First Person.	*Second Person.*	*Third Person.*		*Sign of Genitive & Adjective.*	*Plural.*
mêmu.	miru.	vâru.	avi.		-mu.
√mu.	√ru.	√ru.	√vi.	-di.	-ru.
mâ-yokka.	mi-yokka.	vâri.	vâti.	-yokka.	
mâ □.	mi □.				
nan-gal (nâm).	nin-gal.	aver-kal. (avei).		-athu.	-m.
en-gal-udeyathu, em-athu.	un-gal-udeyathu. um-athu.	oné (?)		-udeyathu.	-r. -gal.
gnan-gal (nâm).	nin-gal.	ava-r.	ava.	-re.	-m.
nan-galudo (nammude).	nin-ga de (nin-gal-ude).	ava-ru-de.	ava-yu-de.	-de.	-r. -gal.
gnangal-kulla □.	ningal-kulla □.	avei-kulla.			
mak (wak).	ima-t (me-kum)	wur-g.			-t.
mar, *before verbs.*	imar, *before verbs.*				-g.
√um.	√ir.	√urg.		-na.	
mow-an (wo-man)	mi-wan.	wurran.		-an.	
nan.	num.	of k ; dâf k'; ef k.			-k.
√n (n. na).	√re (ri).	√r (re).		-nâ.	-m.
nanâ.	numâ.	oftâ. daftâ. eftâ.			
eng. wom. (T)	ning. nimma.	avaru. adâm.			-g.
en-gal-e. emma dd.(T)	nin-gal-e. nimma.			-na.	-m. -ru.
en.	asu.				
em-hi.	ass-ghi.			-ghi.	
nam (om).	nima.	asabar (awar).			-r.
nam-ki (emki).	nim-ki.	asaberi-kl.		-ki.	
me (met).	te (tet).	he (het) (ne ?)			-t.
√mme.	√tte.	√[wat]t. (ht).			
□ mme.	□ nne.	□ nsa. □ sa.			

	Singular.		
63. UGRIC (Lapponian: Norwegian).	*First Person.*	*Second Person.*	*Third Person.*
Nominative. a	mon.	ton.	son.
Status subjectivus. b	-m.	-k.	-.
Casus obliquus. c			
Status prædicativus. d			
1. cum nom.	-m.	-t.	-s.
2. cum verbis [preterite]	-m.	-k.	-.
64. UGRIC. (Syrianian).			
Nominative. a	me.	te.	sya.
Status subjectivus. b	√.	√n. √.	√.
Casus obliquus. c	me-nam.	te-nad.	sy-län.
Status prædicativus. d	□ m.	□ d.	□ s. (√s cum verbo definito.)
65. UGRIC (Tsheremissian).			
Nominative. a	min.	tin.	tidə̈.
Status subjectivus. b	√m.	√t.	√s, √z'e, √.
Casus obliquus. (genitive.) c	min-in.	tin-in.	tidä-n.
Status prædicativus. d	□ m.	□ t.	□ z'e.
66. UGRIC (Ostiakian: Irtishian).			
Nominative. a	ma.	neñ.	teu.
Status subjectivus. b	√m.	√n.	√d. (t).
Casus obliquus. (locat.) c	mana.	neñna.	teu na.
Status prædicativus. d			
1. cum nom.	□ m.	□ n.	□ t.
2. cum verbis transitivis	√m.	√n.	√t.
67. UGRIC (Hungarian).			
Nominative. a	en (ma)	te.	ö.
Status subjectivus. b			
1. intransitive.	√k, √m.	√sz, √l.	√. √n.
2. passive.	√m.	√l.	√k.
Casus obliquus. (accusat.) c	engem-et.	tiged-et.	öt-et.
Status prædicativus. d			
1. cum nom.	□ m.	□ d.	□ ja.
2. cum verbis transitivis	√m.	√d.	√ja.
68. UGRIC (Mordvinian).			
Nominative. a	mon.	ton.	son.
Status subjectivus. (indefinite.) b	√n.	√t. (k).	√s (zo).
Casus obliquus. c			
Status prædicativus. d			
1. cum nom.	□ m (n).	□ t.	□ zo (nzo).
2. cum verbis.	√m ak. (1+2) *me+tu.*	√t an. (2+1) *te+ego.*	√a.
	√m am. (1+3) *me+ille.*	√nz at. (3+2) *ille+te.*	√ze. (3) *id.*
	√m isk. (1+2) *me+vos.*	√d ez. (2 pl.+3) *vobis+id.*	√nk. (3+2 plur.) *id+vos.*
69. SAMOIEDIC (Dialects).			
Nominative. a	O. man (mat).	tan.	tam, tap.
	J. man'.	pudar.	pu da.
	K. man.	tan (than).	di.
	Ja. mod'l.	tod'i.	ni toda.
	T. mannan.	tannan.	se te.
Characteristic consonants of miscellaneous pronominal suffixes.	m, b, p, v, u, n.	t, t', d, d', r, l, lr, n.	t, t', d, d', r.

	Plural.			
First Person.	*Second Person.*	*Third Person.*	*Sign of Genitive & Adjective.*	*Plural.*
mi.	ti.	si.		
-pa.	-baettet (ppet).	-k.		
-mek.	-dek.	-sek.		-k (t).
-mek.	-dek.	-.		
mi.	ti.	nya.		-d ?
√m.	√n ny d.	√nys. √s ny s.		-s.
mi-an.	ti-an.	ny-lăn.	-'an.	
□ nu m.	□ ny d.	□ ny s.		
mä.	tü.	ninä.		-n.
√na.	√da.	√s't. √t. [be. be-s].		-t.
mä-mnän.	tämdän.	ninä-n.	n.	
□ na.	□ da.	□ s't.		
meñ.	neñ.	teg.		-k.
√u.	√dâ (ta).	√t.		-n.
meñna.	neña (?)	teg na.	-na.	
□ u.	□ den (ten).	□ t.		
√u.	√den.	√t.		
mi.	ti.	ök.		-k (t).
√nk.	√tok.	√nak.		
√nk.	√tok.	√uak.		
mink-et.	titek-et.	ök-et.		
□ nk.	□ tok.	□ jok.		
√juk.	√jatok.	√jak.		
min.	tin.	sin.		
√nok.	√do (nk).	√t, √st (2).		
□ mok (nok).	□ nk.	□ st.		-k (t).
√m isk (1+2) *nos+tu.*	√d ezr. (?)	√nze.		
√m ia (1+3) *nos+illi.*		√z.		
mè (mî).	tè.			
man'a.	pudara.			
mi.	s'i.			
mo'di.	to'di.			
men.	tèn.			

	Singular.		
	First Person.	*Second Person.*	*Third Person.*
70. TATARIC (Castren).			
Nominative. a	ben, men, min.	sen, sin, ün.	ol, o, kini.
Status subjectivus. b cum verbis.	√man (pan-ban).	√san.	√.(sin, in imperat).
Casus obliquus. c	ben-i, etc. *mei.* ben-inki, etc. *meus.*		
Status prædicativus. d			
1. cum nomin.	□ m.	□ ñ.	□ i (in). □ si (sin).
2. cum verbis [preterite]	√m.	√ ñ.	√.
71. TATARIC (Yakute: Boehtlingk).			
Nominative. a	min.	ün.	kini, bu (*hic*), ol (*ille*).
Status subjectivus. b	√ben (pen, men).	√ghen (gen, ken).	√-.
Casus obliquus. c	miy-lünü (*meus*).	üy-lünü (*tuus*).	kin-lünü (*suus*), mane (*hunc*), onu (*illum*).
Status prædicativus. d			
1. cum nom. [possessive]	□ m.	□ ñ.	□ ta(ten). □ a (en).
2. cum verbis [perfect]	√-m.	√ñ.	√ a.
72. TATARIC (Osmanli).			
Nominative. a	ben.	sen.	ol (o), bu (*hic*).
Status subjectivus. b	√im.	√sen.	√-.
Casus obliquus. c	benim. (genitive.)	seniñ.	onuñ
Status prædicativus. d			
1. cum nom. [possessive]	□ m.	□ñ.	□ i (in). □ si (sin).
2. cum verbis. [preterite]	√m.	√ñ.	√.
73. MONGOLIC (Buriatian).			
Nominative. a	bi.	s'i, c'i.	ene.
Status subjectivus. b	√p, √m.	√s', √c'.	√-.
Casus obliquus. c	min { (mini, mei). mni. mn. m.	s'in, c'in, tin. { s'ini. sni. sn. s.	eneni.
Status prædicativus. d	□ m.	□ s', □ c'.	□ n (□ ni).
74. MONGOLIC (Sokpa).			
Nominative. a	mi (bi, abu).	cha.	tha.
Status subjectivus. b			
Casus obliquus. c	mini.	chini.	thani.
Status prædicativus. d			
75. TUNGUSIC (Mandshu).			
Nominative. a	bi.	si.	i.
Status subjectivus. b	bi√.	si √.	i√.
Casus obliquus. c	{ min-i (or mi-ni ?) *mei.* min-ingge (*meus*).	{ sin-i. sin-ingge.	{ ini. in-ingge.
Status prædicativus. d	mini □.		
76. TUNGUSIC (Nyertshinsk).			
Nominative. a	bi.	si, s'i.	(i) nuñ m.
Status subjectivus. b	√bi, √u, √f.	√si, √s.	(√n).
Casus obliquus. c	min.	sin.	√in.
Status prædicativus. d	(□ bi, □ u, □ f).	(□ si, □ s).	□ n.

	Plural.		*Sign of Genitive & Adjective.*	*Plural.*
First Person.	*Second Person.*	*Third Person.*		
bis, bister, bisigi. √bis (pis, mis).	sis, sisler, siler, äsigi. √sis (ser).	onlar, onnar, kinilär. √lar, √sinler, in imper.		-lar. -t.-s.-r.
			-i. -inki.	
□ bis (pis, mis). √bis (pis, mis).	□ ñis. √ñis.	□ lary. √ lar.		
bisigi.	äsigi.	kinilär (bulur (*hi*).		-lar.
√bet (pet, met). bis-iänä.	√ghet (get, ket). äs-länä.	√lar. kin-iän-när-ä.	-iänä.	
□ bet. √bet.	□ ghet. √-get.	□ lara. √-lara.		
biz (bizler). √iz. bizum (bizleriñ).	siz (sizler). √siz. sizin.	onlar, bunlar. √ler. onlarun.	-ñ. -iñki.	-lar.
□ -mis. √k.	□ -ñis. √ñiz.	□leri(lerin).□i(in).□si(sin). √ ler.		
bida. √bida (bda, mda). manai.	ta. √ta, √t. tanai.	√-.	-i.	-da.
□ manai (□mnai).	□ tanai.	□ n (□ ni).		
mini ?	chini ?	thani ?		ni ?
			ni.	
be (muse) be√. { men-i. { men-ingge.	sue. sue√. { suen-i. { suen-ingge.	tche. tche √. { tchen-i. { tchen-ingge.	-i,ngge.	-sa, ta, ri. (sei, urse, jergi, tumen, gemu.)
bu. (√wun.) mun. □ wun.	s'i. (√sun). sun. □ sun.	(c'e) nuñar. (√tin) √l. c'en. □ tin.		-r. -l.

THIRD

COMPARATIVE TABLE OF THE NUMERALS

	I.	II.	III.	IV.	V.	VI.
1. CHINESE	'i	eul	san	ssé	'u	lu
2. GYAMI	iku	liangku (ar)	sanku	siku	wuku	leuku
3. KONG-CHINESE Canton (spoken).	yut	ni	sam	si	ung	lok
4. TAI.—*Siamese*	nüng	song	sam	si	ha	hok
5. TAI.—*Ahom*	ling	sang	sam	si	ha	ruk
6. TAI.—*Laos*	nüng	song	sam	si	ha	hok
7. TAI.—*Khamti*	nüng	song	sam	si	ha	hok
8. TAI.—*Kassia?*	wei	ar	lai	sau	san	hinriu
9. TAI.—*Shan* Tenasserim.	nein	htsong	htsan	htse	ha	hoht
10. TRANS-HIMALAYAN.—*Tibetan* (spoken.)	chik	nyi	sum	zhyi	gna	thu
11. TRANS-HIMALAYAN.—*Horpa* N.W. Tibet. Bucharia.	ra	gne	su	hla	gwe	chho
12. TRANS-HIMALAYAN.—*Thochu-Sifan* N. E. Tibet. China.	ari	gnari	kshiri	gzhare	waro	khatare
13. TRANS-HIMALA.—*Gyarung-Sifan* N. E. Tibet. China.	kati	kanes	kasam	kadi	kunggno	kutok
14. TRANS-HIMALA.—*Manyak-Sifan* N. E. Tibet. China.	tabi	nabi	sibi	rebi	gnabi	trubi
15. TRANS-HIMALAYAN.—*Takpa* West of Kwombo.	thi	nai	sum	pli	liagne	kro
16. SUB-HIMALAYAN.—*Kenaveri* Setlej basin.	chik	ni	sum	zhi	gna	tuk
17. SUB-HIMALAYAN.—*Sarpa* West of Gandakéan basin.	chik	nyi	sum	zhyi	gna	tuk
18. SUB-HIMALAYAN.—*Sunwár* Gandakéan basin.	ka	nishi	sang	le	gno	ruk
19. SUB-HIMALAYAN.—*Gurung* Gandakéan basin.	kri	ni	song	pli	gna	tu

APPENDIX.

IN NINETY-SEVEN LANGUAGES.

	VII.	VIII.	IX.	X.	XI.	XII.	XX.	C.	M.
1.	tsi	pa	kieu	shi (sun)	—	—	eul shi	pe	tsian
2.	chhiku	paku	chyuku	ishsa	—	—	airsa	ipe	—
3.	chhat	pat	kau	sap	—	—	—	pak	chin
4.	chet	pet	kau	sip	—	—	ye oip	voi	phan
5.	chit	pet	kau	sip	—	—	sau	pak	—
6.	tset	pet	kau	sip	—	—	sau ntng	hoi	—
7.	tset	pet	kau	sip	—	—	sau	pak	heng
8.	hininn	prah	kandai	shi pon	kad wei	kad ar	ar phon	shi epah	shi hajar
9.	tsit	tet	kaut	tsit	—	—	htsong	hpat	—
10.	dun	gyo	guh	chuh (thamba)	chuh chi	chu nyi	nyi chu	gyathamba	tong
11.	zne	rhiéé	go	sga	—	—	naska	rhya	—
12.	stare	khrare	rguro	hadure	—	—	gninaso	akshi	—
13.	kushnes	oryet	kungga	sih	—	—	kinnis si	parye	—
14.	skwibi	zibi	gubi	chechibi	—	—	nachabi	teje	—
15.	nis	gyet	dugu	pchi	—	—	khali	—	—
16.	dun	gya	gu	chuthamba	chuchik	chumi	nishu	gyathamba	tong
17.	dyun	gye	guh	chuh	—	—	nyi shu	gya	—
18.	chani	yoh	guh	sa shi	—	—	khalka	swaika	—
19.	nis	pre	kuh	chuh	—	—	kuti	—	—

	I.	II.	III.	IV.	V.	VI.
20. Sub-Himalayan.—*Magar* - - Gandakéan basin.	kat	nis	song	buli	banga	—
21. Sub-Himalayan.—*Newár* - - Between Gand. & Koséan bas.	chhi	ni	son	pi	gna	khu
22. Sub-Himalayan.—*Murmi* - - Between Gand. and Koséan bas.	ghrik	gni	som	bli	gna	dhu
23. Sub-Himalayan.—*Limbú* - - Koséan basin.	thit	nyetsh	syum sh	li sh	gna sh	tuk-sh
24. Sub-Himalayan.—*Kiranti* - - Koséan basin.	ektai?	hasat?	sumya	laya	gnaya	tukya
25. Sub-Himalayan. — *Lepcha* - Tishtéan basin	kat	nyet	sam	phali	pha gnon	tarok
26. Sub-Himalayan. — *Bhutanese* - Manaséan basin. (?)	chi	nyi	sum	zhi	gna	dhu
27. Sub-Himalayan.—*Chepang* - Nepal-Terai.	yazho	nhizho	sumzho	ploizho	pumazho	krukzho
28. Lohitic. — *Burmese* - - Burmah and Arakan.	tit (ta)	nhit	thong	le	nga	khyauk
29. Lohitic.—*Dhimál* - - - Between Konki and Dhorla	e-long	nhe-long	sum lang	dia long	nalong	tulong
30. Lohitic.—*Kachari-Bodo* - - Migrat. 88° to 93½° and 25° to 27°.	che	nai (gni)	tham	bre	ba	ro
31. Lohitic. — *Garo* - - - 90° to 91° E. long. 25° to 26° N. lat.	sha	gini	gi tham	bri	bonga	dok (krok)
32. Lohitic.—*Changlo* - - - 91° to 92° E. long.	thur	ngik ching	sam	phi	nga	khung
33. Lohitic.—*Mikir* - - - Nowgong	ichi	hini	ka tham	phi li	phong	thorok
34. Lohitic.—*Dophla* - - - 92° 50′ to 97° N. lat.	aken	ani	a am	a pli	ango	ak ple
35. Lohitic.—*Miri* - - - 94° to 97° E. long. (?)	ako	a ni ko	a um ko	a pi ko	a ngo ko	a keng ko
36. Lohitic.—*Abor-Miri* - - -	ako	aniko	aomko	apiko	pilingoko	akeko
37. Lohitic.—*Abor* - - - 97° to 99° East long.	ako	ani	angom	api	pilango	akye
38. Lohitic.—*Sibsagor-Miri* - -	atero	ngoye	auma	apie	üngo	akünge
39. Lohitic.—*Singpho* - - 27°. to 28° North lat.	aima	nkhong	ma sum	meli	manga	kru
40. Lohitic.—*Naga Tribes* - - 93° to 97° E. long. 23° N. lat. (Mithan). E. of Sibsagor.	atta	anyi	a zam	ali	aga	arok
41. Lohitic.— *Naga Tribes* - - (Namsang).	vanthe	vanyi	van ram	beli	banga	irok
42. Lohitic.—*Naga tribes* - - Nowgong.	katang	anna	asam	pazr	pungu	tarok

	VII.	VIII.	IX.	X.	XI.	XII.	XX.	C.	M.
20.	—	—	—	—	—	—	—	—	—
21.	nhe	chya	gun	sanho	—	—	sang sanho (nie)	gun sanho (sat-chi)	—
22.	nis	pre	kuh	chiwai (kun)	—	—	nhi shu	bokal gna	—
23.	nu sh	yet sh	phang sh	thi bong	—	—	ni bong	thi bong gip	—
24.	bhâgya	reya	phangya	kip	—	—	—	—	—
25.	ka kyok	kakeu	ka kyot	ka ti	katip	nyetip	kha kat	kha pha gnon	—
26.	dun	gyŏo	gu	cha thani	—	—	nyi sho (khechik)	khé gna	—
27.	chanazho	prapzho	takuzho	gyibzho	—	—	—	—	—
28.	khunnhit	shyit	ko	she	she tit	she nhit	nhit she	taya	—
29.	nhilong	yolong	kuhalong	telong	—	—	clong bisa	na bisa	—
30.	sni	jat	chku	ji	—	—	chokai ba (bisha che)	bisha ba	—
31.	sni	chèt	shku	skang	chishá	chigini	chiskang (rung)	rung bonga	—
32.	zum	yen	gu	se (song)	song thur	song nyik ching	khai thur	khenga	nisi nik ting dang khaise
33.	thorchi	nirkep (10.2)	chitkep (10.1)	kep	kepaichi	kepahini	kepa kep (ingkol)	phar	—
34.	kanag	plag nag	kayo	rang	rang ta akin	rang la ani	rang chang	—	—
35.	ki nit ko	pi ni ko	ko nang ko	u ying ko	u ying ko a ko	u ying ko aniko	u ying an iko	—	—
36.	kunitko	punitko	ko nangko	uyingko	—	—	irlingko	—	—
37.	konange	pini	kinide	üyinge	—	—	üying anyiko	üying üyingko	—
38.	kiinnide	pinye	konange	üyinge	—	—	—	—	—
39.	sinit	matsat	tsekhu	si	si ai	si nkhong	khun	lat-sa	hing
40.	anath	achot	aku	ban	—	—	cha	puga	—
41.	ingit	isat	ikhu	ichi	ichi yanthe	ichi vanyi	ruak nyi	chathe	cha ichi
42.	tanet	te	taku	tarr	—	—	matsü	rokrü	—

	I.	II.	III.	IV.	V.	VI.
43. Lohitic.—*Naga tribes* Tengsa.	khatu	annat	asam	phato	phungu	thelok
44. Lohitic.—*Naga tribes* Tablung, N. of Sibsagor.	cha	ih	lem	pili	nga	vok
45. Lohitic.—*Naga tribes* Khari. Jorhat.	nkhet	anne	asam	phali	phanga	tarok
46. Lohitic.—*Naga tribes* Angami, South.	po	kane	sii	deh	pangu	soru
47. Lohitic.—*Kuki* N. E. of Chittagong.	katka	nika	tumka	lika	rungaka	ruka
48. Lohitic.—*Khyeng* (*Shyu*) 19° to 21° N. lat. Arakan.	nhat	pan nhi	thum	lhi	nghau	sauk
49. Lohitic.—*Kami* Kuladan R. Arakan.	ha	ni	ka tun	ma li	nang nga	ta u
50. Lohitic.—*Kumi* Kuladan R. Arakan.	ha	nhu	tum	pa lu	pan	ta ru
51. Lohitic.—*Shendus* 22° to 23°, and 93° to 94°.	mekha	meny	me thao	me pulli	mepa	me churru
52. Lohitic.—*Mru* Arakan. Chittagong.	loung	pre	shun	ta li	ta nga	ta ru
53. Lohitic.—*Sak* Naaf River, East.	su war	nein	thin	pri	nga	khyouk
54. Lohitic.—*Tungthu* Tenasserim.	ta	ne	thung	lit	ngat	ther
55. Munda.—*Ho* Kolehan.	mind	barria	appia	upunia	moya	turuia
56. Munda.—*Sinhbhum Kol* Chyebossa.	mi	barria	apia	upunia	moya	turia
57. Munda.—*Sontal* Chyebossa.	midh	barria	pia	ponia	monegotang	turui
58. Munda.—*Bhumij* Chyebossa.	moy	barria	apia	upunia	monaya	turuya
59. Munda.—*Mundala* Chota Nagpur.	mia	baria	apia	upnia	moria	turia
60. Tamulic.—*Canarese*	ondu	eradu	muru	nalku	ayidu	aru
61. Tamulic.—*Tamil*	onru	irandu	munru	nalu	anju	aru
62. Tamulic.—*Telugu*	oka	rendu	mudu	nalugu	ayidu	aru
63. Tamulic.—*Malabar*	ondu	irandu	mundu	nalu	inthu	aru
64. Tamulic.—*Malayalam*	onna	renda	munnar	nala	anja	ara
65. Tamulic.—*Gond*	undi	ranu	munu	nalu	saiyan	sarong
66. Tamulic.—*Brahui*	asit	irat	muoit	Sk. char	panj	shash
67. Tamulic.—*Tuluva*	onji	erad	muji	nalu	ayinu	aji

	VII.	VIII.	IX.	X.	XI.	XII.	XX.	C.	M.
43.	thanyet	thesep	thaku	thelu	—	—	machi	mesung phungu	—
44.	nith	thath	thu	pan	—	—	—	—	—
45.	tani	sachet	tekü	taraih	—	—	makhi	rukra	—
46.	thene	thetha	thaku	kürr	—	—	makü	kre	—
47.	sarika	riktka	koka	sumka	—	—	—	rasa	sunka
48.	she	sat	ko	ha	—	—	kur	klaat	—
49.	sa ri	ka ya	ta-ko	ha suh	—	—	ku suh	ta-ra	—
50.	sa ru	ta ya	ta kau	hau	—	—	a pum re	chum wari	—
51.	me sharri	me charia	me chuku	me hra	hlekha	hle ny	meku	ya kha	sho kha
52.	ra nhit	ri yat	taku	ha	—	—	pi ra-ni	—	—
53.	tha ni	a tseit	ta fu	si su	—	—	hun	taya	—
54.	nwot	that	kút	tahsi	—	—	he	taloyeu	—
55.	aya	irilia	arrea	gel	gelmiad	gelbarria	hissi	mi sow	—
56.	iya	irlia	area	gelea	—	—	hissi	moy hissi	—
57.	iair	iral	are	gel	—	—	—	monay hissi	—
58.	Sk. sath	ath	nou	das	—	—	—	sou	—
59.	Sk. sath	ath	noko	dasgo	—	—	bis	midso	—
60.	elu (yelu)	entu	ombhattu	hattu (pattu)	10+1	10+2	pat (ippatu)	nuru	savira
61.	ezhu	ettu	onbadu	patta	—	—	irupadu	nuru	—
62.	ettu	enimfdi	tommidi	padi	—	—	iruvai	nuru	—
63.	elu	ettu	onpathu	pat thu	—	—	irupathu	nuru (vanda)	—
64.	ezha	etta	ombada	patta	—	—	iruvada	nura	—
65.	yenu	anamur	urmah	pada	—	—	bisa	nur	—
66.	haft	hasht	nuh	dah	yazda	dunzda	bist	sad	—
67.	al	enamie	orambo	pattu	—	—	irvo	nuru	—

	I.	II.	III.	IV.	V.	VI.
68. Tamulic. — *Toduva*	won	edd	minn	nonk	yajj	orr
69. Tamulic. — *Uraon-kol*	unta	enotan	manotan	nakhotan	Sk. panje	se
70. Ugric. — *Finnish*	yksi	kaksi	kolme	neljä	viisi	kuusi
71. Ugric. — *Esthonian*	üks (üts)	kaks (kats)	kolm	nelli	wiis	kuus
72. Ugric. — *Lapponian*	akt (oft)	kvekte	kolm	nielj	vit	kot
73. Ugric. — *Syrianian*	ötik	kyk	kujim	njolj	vit	kvait
74. Ugric. — *Tscheremissian*	ik	kok	kum	nil	vis	kut
75. Ugric. — *Mordvinian*	väike (vä)	kavto	kolmo	nile	väte	kotò
76. Ugric. — *Ostiakian*	it (i. ja)	kat	chudem	njeda	vet	chut
77. Ugric. — *Hungarian*	egy	kettö	harom	negy	öt	hat
78. Ugric. — *Vogulian*	äkvä (vä)	kit	korom	nila	ät	kot
79. Samoiedian	op	side (siri)	när	tet	samlik	mat
80. Tataric. — *Yakut*	bir	ikki	üs	tüört	biäs	alta
81. Tataric. — *Uigur*	bir	iki	ütsh	tört	bish	alty
82. Tataric. — *Tshuvash*	per	ikke	wisse	dwata	pilik	olta
83. Tataric. — *Osmanli*	bir	iki	üc	dört	besh	alti
84. Mongolic. — *Olöt*	nike	khoyor	gurban	durbun	tabun	zurgan
85. Mongolic. — *Sokpa* N. E. ? Tibet.	nege	hoyur	korba	tirba	thaba	chorka
86. Mongolic. — *Aimak*	nikka	koyar	ghorban	dorban	tabun	jolan
87. Tungusic. — *Mandshu*	emu	juc	ilan	duin	sunja	ningun
88. Caucasc. — *Lazian*	ar	zur	jum	otch	chut	ash
89. Caucasic. — *Suanian*	eshchu	ieru	semi	woosh'theli	wochushth	uskhwa
90. Caucasic. — *Mingrelian*	arti	shiri	sumi	otchi	chuthi	apchshui
91. Caucasic. — *Georgian*	erthi	ori	sami	othchi	chut hi	okhwsi
92. Caucasic. — *Abchasian*	aka	wiba	chiba	phshiba	chuba	fba

	VII.	VIII.	IX.	X.	XI.	XII.	XX.	C.	M.
68.	—	ett	onbod	pott	—	—	ivvod	onnur	—
69.	sat	ate	no	das	—	—	bis	se	—
70.	scitsemün	kahdeksan (10.2)	yhdeksan (10.1)	kymmenen	yksi toista kymmentä	—	kaksi kymmentä	sata	tuhat
71.	scitse	kattesa	üttesa	kümme	—	—	—	—	—
72.	ćeć	kaktse	aktse	lokke	—	—	—	—	—
73.	sizim	kökjaamys (10-2)	ókmys (10.1)	das	dasötik	daskyk	kyzj	sjo	tüsacja (sjurs)
74.	sim	kändäxse (10.2)	endexse (10.1)	lu	luat iktät	luat koktat	koklu	syde	tizem
75.	tabet (sabet)	nida (nit)	arjon	jon	ja chat jon	kat chat jon	chus	sot	taras
76.	het	nyolcz (10.2)	kilencz (10.1)	tiz	tizenegy	tizen kettö	husz	szaz	ezer
77.	siu	sindet	chasawat	luzeyu	—	—	—	—	—
78.	sisem	kavkso	väikse	kämen	—	—	—	koms	—
79.	sättä	aghes	toghus	uon	uon bir	uon ikki	sürbä	süs	tesensa
80.	yidi	sekiz	toghuz	on	onbir	onikki	igirmi	yus	ming
81.	sat	njalalu	antalu	lava	au kuiplu	—	kit kuiplu	kus	—
82.	sicce	sakkyr	tuhur	wonna	woni per	won ikke	sirim	sur	pin
83.	yedi	sekiz	dokuz	on	onbir	oniki	yigirmi	yuz	bing
84.	dolon	naiman	yese	arban	arban nike	arban khoyor	khorin	—	—
85.	tolo	nema	yeso	arba	—	—	hore	chovo	—
86.	jurghan	—	—	—	—	—	—	—	—
87.	nadan	jakon (10.2)	onyun (10.1)	juan	juan emu	juan jue	orin	tanggo	minggan
88.	shkit	ovro	cchoro	wit	witwar	witsur	öć	osh	shilia
89.	ishkwid	ara	echara	iehsth	ieshth eshchu	ieshth ieru	ieruieshth	ashir	athas
90.	shqwithi	ruo	cchoro	withi	—	—	etshi	oshi	—
91.	shwidi	rwa	zehra	athi	—	—	ozi	assi	—
92.	bishba	aaba	shba	shwaba	shweiza	shwewa	eshwa	shke	—

	I.	II.	III.	IV.	V.	VI.
93. Basк - - - - - - -	bat	bi	hirur	laur	bortz	sei
94. Coptic - - - - - - -	va	snous	somnt	ftov (ftu)	tiv (tu)	sov
95. Hebrew - - - - - -	ĕkhad	shnayim	shloshâh	arbâ-ghâh	khamishâh	shishâh
96. Pehlevi (Coins) - - - -	achad	tarein	talata	arba	khomasha	shata
97. Sanskrit - - - - - -	ekas	dvâu	trayas	katvâras	pañka	shat

	VII.	VIII.	IX.	X.	XI.	XII.	XX.	C.	M.
93.	zazpi	zortzi	bederatzi	hamar	hameiza	hamabi	hogoi	chun	milliun
94.	sashf	shmun	psis	mét	metva	metsnous	guot	she	sho
95.	shibghâh	shmonâh	tishghâh	ghasârâh	âkhadghâsâr	shnighâsâr	ghesrim	méâhō	ĕlĕph
96.	sheba	tomena	tisha	ashra	yajdeh	duajdeh	vist	sat	—
97.	sapta	ashtau	nava	dasa	ekâdasa	dvâdasa	vinsati	satam	sahasram

END OF THE FIRST VOLUME OF "OUTLINES."

ERRATA.

Page 108. line 9. for "*exter*" read "*exta.*"
144. line 3. from bottom, delete "*and Tribes.*"

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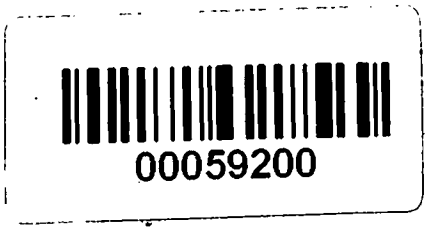
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